APPLICATION FOR SECTION 404 AFTER-THE-FACT INDIVIDUAL PERMIT AND SECTION 401 WATER QUALITY CERTIFICATION

MCGRUDER PROPERTY-TRACT 1 BULLITT COUNTY, KENTUCKY

Prepared for:

U.S. ARMY CORPS OF ENGINEERS LOUISVILLE DISTRICT

and

KENTUCKY DIVISION OF WATER

February 2009

REDWING
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February 20, 2009

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U.S. Army Corps of Engineers – Louisville District
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Louisville, Kentucky 40202

Mr. Jesse Robinson
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Kentucky Division of Water
200 Fair Oaks
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Subject: **Application for Section 404 After-The-Fact Individual Permit and Section 401 Water Quality Certification**
McGruder Property-Tract 1
Bullitt County, Kentucky
Redwing Project 08-096

Dear Mr. Parker and Mr. Robinson:

Redwing Ecological Services, Inc. (Redwing), on behalf of Rolling Acres Farm, LLC (Rolling Acres), respectfully submits this joint Application for a Section 404 After-The-Fact Individual Permit and Section 401 Water Quality Certification (WQC) for the proposed development of the approximately 67-acre McGruder Property – Tract 1 (Tract 1) in Bullitt County, Kentucky. Impacts associated with the proposed project include unauthorized filling of waters/wetlands of the U.S. and proposed future impacts necessary for project implementation. The total permanent jurisdictional impacts, unauthorized and proposed, include approximately 1.23 acre of emergent wetland and 105 linear feet (0.004 acre) of ephemeral stream. Mitigation for the above-described emergent wetland impacts will include the purchase of 2.50 acres of wetland mitigation credits from an approved wetland mitigation bank in Nelson County, Kentucky. Mitigation for ephemeral stream impacts will be provided for through the stormwater management system designed for the project. Additionally, 135 linear feet of intermittent stream have been temporarily impacted but are presently being restored. The 50-foot (25 feet on each side of the stream) riparian corridor along the length of intermittent stream will be re-established through planting of woody tree and shrub species.

This application report presents required project information and additional supplemental information, including project purpose and need, project alternatives, project impacts, and proposed compensatory mitigation to assist your review.

We appreciate the opportunity to work with you on this project. Please contact Kiersten Fuchs or Brad Anderson at (502) 625-3009 with any questions you have during your review.

Sincerely,

Bradley M. Anderson, PE
Project Engineer II

Kiersten R. Fuchs by JMC
Kiersten R. Fuchs
Principal
Senior Wildlife Biologist

File: 08-096\Reports\IP-Report-Revised per USACE Meeting on 1-22-09

cc: Mr. Gary McGruder – Rolling Acres Farm, LLC
Mr. Mike McBrayer – Opus North Corporation (2 copies)
Mr. Steve Scott – Mindel Scott & Associates, Inc.

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Submitted to:

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LOUISVILLE DISTRICT

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KENTUCKY DIVISION OF WATER

Prepared by:

Redwing Ecological Services, Inc.
Louisville, Kentucky

Bradley M. Anderson, P.E.
Project Engineer II

Kiersten R. Fuchs
Principal
Senior Wildlife Biologist

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EXECUTIVE SUMMARY

Rolling Acres Farm, LLC (Rolling Acres), proposes the industrial development of the McGruder Property – Tract 1 (Tract 1) in Bullitt County, Kentucky. The approximately 67-acre project site is located east of Interstate 65 (I-65) and southeast of the intersection of Kentucky Highway 480 (Hwy 480) and Buffalo Run Boulevard (Figure 1). The purpose of the development is to provide new industrial opportunities along the Interstate 65/Kentucky Highway 480 corridor in Bullitt County, Kentucky. The proposed project represents the least environmentally damaging practicable alternative for meeting this need based on an assessment of alternative sites and alternative designs.

Redwing performed a delineation of waters of the U.S. currently present on the site on November 13, 2008 and January 8, 2009. Existing on-site jurisdictional features identified include the perennial stream Buffalo Run totaling 765 linear feet (0.25 acre), two intermittent streams totaling 620 linear feet (0.06 acre), one ephemeral stream totaling 15 feet (0.001 acre), and three emergent wetlands totaling 0.25 acre (Figure 3).

It was also determined during the delineation that unauthorized impacts to waters/wetlands of the U.S. had occurred on the project site and include the filling of two ephemeral streams totaling approximately 90 linear feet (0.003 acre) and two emergent wetlands totaling 1.13 acres. Additionally, 135 linear feet of intermittent stream were temporarily impacted and is being restored. The proposed development will result in additional unavoidable jurisdictional impacts to two emergent wetlands totaling 0.10 acre and one ephemeral stream totaling 15 linear feet (0.001 acre). These additional impacts will result in total jurisdictional impacts, including unauthorized and proposed, of 105 linear feet (0.004 acre) of ephemeral stream and 1.23 acres of wetland (Figure 4). Rolling Acres is requesting an After-The-Fact Individual Permit and Water Quality Certification for these impacts.

Proposed mitigation for the above-described wetland impacts includes the purchase of 2.50 acres of wetland mitigation credit from an approved wetland mitigation bank in Nelson County, Kentucky. Proposed mitigation for ephemeral stream impacts will be provided for through the stormwater management system designed for the project.

A Phase I archaeological survey of the Property has not been conducted at this time, and there are no known cultural historic resources remaining on the property. The Rolling Acres Farm Cemetery was relocated on September 19, 2008 to the Cedar Grove Cemetery and the Maraman Family Cemetery. Five federally endangered and threatened species are listed by the U.S. Fish and Wildlife Service (USFWS) as potentially occurring in Bullitt County, Kentucky. The site has been cleared and no potential habitat for any federally threatened or endangered species exists on the property. No adverse effect is anticipated from this project on any of these species.

TABLE OF CONTENTS

Page

LIST OF FIGURES

Figure

LIST OF PHOTOGRAPHS

Photograph

1. View facing northwest of typical open field habitat found throughout the site. McGruder Property – Tract 1. November 13, 2008.

2. View of Wetland 1 found in southwestern portion of site. Edge of fill seen on right side of photograph. McGruder Property – Tract 1. November 13, 2008

3. Upland open field habitat found in south-central portion of site. McGruder Property – Tract 1. November 13, 2008.

4. Intermittent Stream 2 found in southeastern corner of site. Intermittent 2 connects to Wetlands 2 and 5 making them jurisdictional. McGruder Property – Tract 1. November 13, 2008.

5. View facing south of emergent Wetland 2, immediately west of Intermittent Stream 1. McGruder Property – Tract 1. November 13, 2008.

6. View of Wetland 5 in southeastern corner of site. McGruder Property – Tract 1. November 13, 2008.

7. Wetland 3 looking north in southwestern portion of site. This wetland was dominated by such species as rough barnyard grass (*Echinochloa muricata*) and black willow (*Salix nigra*). McGruder Property – Tract 1. November 13, 2008.

8. View of Intermittent 1 looking west. This portion of the stream has been temporarily impacted by past filling and grading activities and is being restored. McGruder Property – Tract 1. November 13, 2008.

9. View looking southeast of impacted Wetland 4. Intermittent Stream 1 can be seen in the background flowing to the left. McGruder Property – Tract 1. November 13, 2008.

10. View of southern portion of fill activities involving Wetland 4. McGruder Property – Tract 1. November 13, 2008.

11. View of ditch found in central portion of site. Ephemeral Stream 2 and Wetland 4 were found here prior to impact. McGruder Property – Tract 1. November 13, 2008.

12. View looking east along ditch that flows from former Wetland 4 into Intermittent Stream 1. McGruder Property – Tract 1. November 13, 2008.

13. Open field habitat found in northern portion of site. This area is dominated by such species as tall fescue (*Festuca arundinacea*) and common plantain (*Plantago major*). McGruder Property – Tract 1. November 13, 2008.

14. View looking east of ditch in northern portion of site. Edge of fill area can be seen on left side. McGruder Property – Tract 1. November 13, 2008.

15. Northern portion of site looking west. Area has been filled in the past. McGruder Property – Tract 1. November 13, 2008.

16. Perennial stream Buffalo Run found in the northeastern portion of the property. The stream has been historically re-routed. McGruder Property – Tract 1. November 13, 2008.

1.0 INTRODUCTION

Rolling Acres Farm, LLC (Rolling Acres) respectfully submits this joint Application for a Section 404 After-The-Fact Individual Permit and Section 401 Water Quality Certification to the U.S. Army Corps of Engineers (USACE) and the Kentucky Division of Water (KDOW), respectively, for wetland and stream impacts associated with the proposed development located in Bullitt County, Kentucky. The application covers water/wetland impacts associated with the proposed approximately 67-acre McGruder Property – Tract 1 (Tract 1) industrial development in Bullitt County, Kentucky. This application covers both unauthorized impacts and proposed impacts needed to complete this project. The main objectives of this report are to discuss:

- the proposed project in terms of history, purpose and need, alternatives, and proposed development plans
- existing conditions and presumed conditions prior to the unauthorized impacts at the site in terms of natural habitats, wetland functions and values, and stream quality
- proposed project impacts
- proposed compensatory mitigation for unavoidable water/wetland impacts

A completed Application for Department of the Army Permit and Application for Water Quality Certification are provided in Appendix A. A list of adjacent property owners is provided in Appendix B. Routine Wetland Determination Data Forms and Rapid Bioassessment Protocol Forms are provided as Appendices C and D, respectively. A Preliminary Jurisdictional Determination Form is provided as Appendix E. Documentation for previous permits issued by the USACE & KDOW for this site are provided in Appendices F and G. Appendix H provides the permits for the relocation of the Rolling Acres Farm Cemetery.

2.0 PROJECT DESCRIPTION

Rolling Acres is proposing the industrial development of the approximately 67-acre Tract 1 located in Bullitt County, Kentucky (Figure 1). The Tract 1 is located east of I-65 and southeast of the intersection of Kentucky Highway 480 and Buffalo Run Boulevard. Large sections of the property have been graded, with some areas having been filled with shale and soil. The remaining areas on the property consist of open field habitat dominated by upland vegetation (Figure 2). Three emergent wetlands and four streams running north/south are located on the project site (Figure 3).

2.1 PROJECT HISTORY

The Opus North Corporation (Opus) has entered into a contract with Rolling Acres to potentially purchase an approximately 34.5-acre parcel of Tract 1. Redwing Ecological Services, Inc. (Redwing), on behalf of Opus, conducted a water/wetland reconnaissance survey of the 34.5 acre parcel on August 21, 2008. During the reconnaissance visit, Redwing observed areas of possible unauthorized impacts to jurisdictional waters of the U.S. Based upon the findings during the reconnaissance visit, Redwing recommended that a site meeting be conducted with the USACE to discuss permitting the 34.5-acre parcel.

On November 5, 2008, a site meeting was conducted between the USACE, Opus, Mindel Scott and Associates, Rolling Acres, and Redwing to discuss permitting of the approximately 34.5-acre parcel. During the site visit, the USACE commented that there appeared to be impacts to jurisdictional waters/wetlands of the U.S. on Tract 1 and requested that the boundaries of waters/wetlands on Tract 1 be delineated to identify if any impacts to waters/wetlands of the U.S. have occurred. The USACE also state that an After-The-Fact Individual Permit would be needed for Tract 1.

Redwing performed a delineation of waters of the U.S. currently present on the site on November 13, 2008 and January 8, 2009. Existing on-site jurisdictional features identified include perennial stream Buffalo Run totaling 765 linear feet (0.25 acre), two intermittent streams totaling 620 linear feet (0.06 acre), one ephemeral stream totaling 15 feet (0.001 acre), and three emergent wetlands (Wetlands 1-3) totaling 0.25 acre (Figure 3).

It was also determined during the delineation that unauthorized impacts had occurred on the project site and include the filling of two ephemeral streams totaling approximately 90 linear feet (0.003 acre) and two emergent wetlands (Wetland 4 and 5) totaling 1.13 acres. Additionally, 135 linear feet of Intermittent Stream 1 were temporarily impacted and is being restored. The proposed development will result in additional unavoidable jurisdictional impacts to two emergent wetlands totaling 0.10 acre and one ephemeral stream totaling 15 feet (0.001 acre), resulting in total jurisdictional impacts to 105 linear feet

(0.004 acre) of ephemeral stream and 1.23 acres of emergent wetland (Figure 4). Rolling Acres is requesting an After-The-Fact Individual Permit and Water Quality Certification for these impacts. Compensatory mitigation is presented in Section 6.0 of this joint permit application that compensates for past and future impacts as part of this water/wetland permit application for industrial development of the overall site.

A meeting was conducted between Mr. Parker and Ms. Thomason of the USACE, Mr. McGruder of Rolling Acres, and Ms. Fuchs and Mr. Anderson of Redwing on January 22, 2009 to discuss the extent of jurisdictional features presently on Tract 1 as well as what features may have been present prior to the filling and grading activities. Past and proposed impacts to jurisdictional were also discussed. At the conclusion of the meeting it was agreed upon as to the extent of both jurisdictional wetlands currently present on site as well as those that were likely present prior to filling and grading activities site, and it was also agreed upon as to the extent of past jurisdictional impacts.

2.2 PROJECT PURPOSE AND NEED

The purpose of this project is to provide opportunities for light industrial/warehousing facilities within the Interstate 65/Hwy 480 corridor in Bullitt County, Kentucky. Generally, the need for large tracts of land for development has increased within the Louisville metropolitan area, and the Cedar Grove/Shepherdsville area offers a strong market for these types of developments. The driving force behind the need for this proposed project is the emergence of the Louisville area as a prime location for national distribution centers. This emergence has come from the presence of the UPS Hub at the Louisville International Airport, the expansion of the Louisville International Airport and the Renaissance Zone Business Area, as well as Louisville's location within the western portion of the Eastern Time Zone, which facilitates on-time delivery to all parts of the country. The McGruder Property – Tract 1 offers an excellent opportunity for industrial expansion with immediate access to I-65, and Rolling Acres has a contract with Opus for the approximately 34.5-acre parcel in the southeast portion of the site.

The minimum size required for the large distribution centers is approximately 200,000 ft^2 buildings with the potential to expand to 400,000 ft^2 or 800,000 ft^2 buildings. As examples of typical requirements, Guess?, Universal Coach, Lock Tite, and ProLogis have developed distribution centers with under roof square footage of: 375,000 expandable to 800,000; 352,000; 150,000 expandable to 375,000; and 400,000, respectively. Minimum tracts of land that are needed to house these large buildings and support facilities (parking, truck ports, etc.) are between 25 and 50 acres, under ideal situations. Site constraints such as streams/wetlands, land use issues, infrastructure, and site topography often cause significantly more land to be required.

A secondary purpose of this project is to provide job creation and economic opportunities to this rapidly developing portion of Bullitt County. Over the last 10 years, Cedar Grove Business Park, located immediately east of the proposed project, has brought large national companies to Bullitt County increasing the local workforce significantly. The increase in industrial development and job opportunities has been economically important to this region of Kentucky. This area has also seen moderate residential growth over the past several years with a variety of new multi-family and single-family developments underway and in the planning stages which will supply a labor workforce for the expanding development in this community. One of the largest developments is the Heritage Hill golf and residential development located on 850 acres approximately one-half mile east of the McGruder Property – Tract 1.

The third purpose of this project is to help resolve the unauthorized impacts to jurisdictional waters of the U.S. and provide mitigation for these impacts.

2.3 SITE HISTORY

The McGruder Property – Tract 1 encompasses the parcel of a single landowner. The landowner has utilized the property for agricultural and pasture activities, as well as an inactive golf range/daycare. Wetland areas have been historically ditched and drained for agricultural use and impacted by these activities (Figure 3). As part of the agricultural and farming maintenance activities, portions of streams have been relocated or straightened.

Buffalo Run is a perennial stream that flows through the northeastern corner of the property. This stream was re-routed in 1996 along the northeastern property boundary to increase farmland that could be utilized for agricultural activities. This stream re-routing was authorized by the USACE under a Nationwide Permit 26 on October 8, 1996, USACE ID No. 199601460-mkm, and by the KDOW under a Water Quality Certification on September 18, 1996. Each of these authorization documents are provided as Appendix F.

A portion of Intermittent Stream 1 was straightened in the southwest corner of the property to allow the re-routing of an existing farm road. This activity was authorized by the KDOW through a Stream Construction Permit on October 31, 1995. This straightened section of Intermittent Stream 1 presently functions more like a linear wetland and was considered Wetland 3 during Redwing's water/wetland delineation on November 13, 2008. A copy of the KDOW's Stream Construction Permit is provided as Appendix G.

3.0 PROJECT ALTERNATIVES

As required by Section 404(b)(1) guidelines, an alternatives analysis of the proposed industrial/warehousing development project has been conducted. Under this analysis, the approximately 67-acre McGruder Property – Tract 1 has been identified as the least environmentally damaging, practicable alternative for meeting identified project needs.

3.1 ALTERNATIVE SITE LOCATION

As indicated in previous sections, the purpose of the Tract 1 development is to provide warehousing and distribution infrastructure for clients in Bullitt County, Kentucky. Several key factors were chosen as evaluation criteria to analyze potential alternatives to the project including:

- **Size of the industrial lots** – Companies that are building large distribution centers need lots that are 50 to 100 acres or greater in size to support the warehouses and associated parking lots, traffic lanes, and loading docks.
- **Availability of all utilities** – Readily available utilities (water, electric, sewer, etc.) are required for the development of large distribution centers.
- **Highway access** – Direct access to a major highway, such as I-65, is imperative for easy access of on-and-off truck traffic and for businesses that are tied to quick delivery of items to the airport and other metropolitan locations.
- **Proximity to the airport** – Close proximity of large industrial complexes to the airport is essential for companies (especially e-commerce and computer companies) due to the fact that the business is dependent upon shipping services supplied at the airport.
- **Availability of the property** – There are several large industrial complexes located in Louisville, but most of these complexes are at capacity or do not have the sufficient size tracts available for a large distribution center. Additionally the property must be available for purchase.
- **Existing topography** – Large industrial complexes require that the land is relatively flat in nature for feasible construction. The construction of large warehouses of approximately 400,000 ft^2 must be done on flat building pads, which can not be feasibly constructed on land with substantial slope, shallow bedrock, and other limiting topographic features.
- **Environmental concerns** – Issues that may restrict development opportunities may include environmental contamination, jurisdictional water/wetland impacts and permitting, threatened and endangered species habitat, and cultural resource issues.
- **Current zoning of the property** – Industrial development is often not compatible with adjacent land uses and can result in strong community opposition if proposed in primarily rural, residential, or commercial areas.
- **Expansion opportunities** – The immediate access to large tracts of undeveloped land fulfilling the above requirements for future expansion opportunities.

3.1.1 Off-site Alternative Locations

Figure 5 shows two off-site locations within the I-65/Hwy 480 interchange that were considered in the alternatives analysis.

Site 1: This approximately 150-acre parcel is currently for sale for commercial or industrial use. Similar to the McGruder Property - Tract 1, this site has direct access to I-65 and is within the same proximity of the Louisville International Airport. Site 1 also offers the potential for similar size lots needed for large industrial warehouse buildings.

This site, however, has several wetlands and a drainage that would be impacted if the property were fully developed and would require agency permitting prior to development. The topography on Site 1 is relatively flat, but a large portion of the property is located within the 100-year floodplain. In order to develop this property for industrial development, a significant amount of fill would need to be imported to make this site usable. Floodplain compensation would need to be provided in another location, adding an additional expense to the development budget. The McGruder Property - Tract 1 property will require filling of a smaller area of floodplain, but the fill will be obtained on-site, reducing the cost of importing soil. Finally, a large portion of the Site 1 property does not have all available utilities, whereas the McGruder Property - Tract 1 has access to all major utilities.

It was determined that the Site 1 property was not economically feasible to develop in comparison to the McGruder Property - Tract 1 based on much larger site development costs (floodplain filling and utilities).

Site 2: This is an approximately 34-acre property adjacent to the Cedar Grove Business Park that is currently not available for sale. In comparison to the McGruder Property - Tract 1, this site has direct access to I-65 and is within the same proximity of the Louisville International Airport. Site 2 could also offer the potential for a similar size lot needed for construction of a large industrial warehouse building.

However, this site has several wetlands and streams which would be impacted if the property were fully developed and would require agency permitting prior to development. Because the site is not flat, a large amount of earthwork would be required to make the property suitable for industrial development, thus creating significant site development costs. Finally the site is currently under option by another developer.

The Site 2 property was not economically feasible to develop in comparison to the McGruder Property - Tract 1 property based on much larger site development costs and the unavailability of the property.

3.1.2 Proposed Alternative

The proposed Tract 1 has been identified as the only practicable alternative to meet the identified project purpose and need for the development of a large industrial/warehousing center. The proposed development meets the siting requirements identified above and is one of the only properties of its size and layout available in Bullitt County. Additionally, the proposed development:

- is located within a reasonably close distance to the Louisville International Airport and adjacent to the UPS Logistics Center
- has direct access to I-65 and the airport
- in it's current design, allows for the development of a large warehouse site suitably sized for an industrial/warehousing center
- is currently zoned for agricultural, residential and industrial use, and is compatible with adjacent land use (mainly Cedar Grove Business Park)
- has ready access to all utilities needed for construction and operation of the proposed facilities
- is owned by Rolling Acres who also owns undeveloped properties to north, south, and west of the proposed Tract 1
- has existing topography that is primarily flat and a large portion of the site has been disturbed through grading and filling activities
- is within a close distance to the existing Cedar Grove Business Park providing a support structure and workforce opportunities

Additionally, pursuing the development of nearby properties instead of the selected Tract 1 would likely result in increased impacts to jurisdictional waters/wetlands, floodplain issues, or threatened or endangered species habitat or cultural historic issues.

3.2 ON-SITE DESIGN ALTERNATIVES

Design alternatives were evaluated for the Tract 1. The potential for avoiding and minimizing impacts to on-site wetlands is severely restricted by the location of the Wetland 1 which is located in the most opportune location for access to the southern portion Tract 1 and the former location of Wetland 4, which is located in an area that will be needed for trailer parking when the north portion of Tract 1 is developed. Each of the design alternatives is discussed below.

3.2.1 No Impact Alternative

This alternative avoids all jurisdictional waters. However, because of the location of the streams and wetlands, the size and usable area would be severely reduced. This design alternative is not practicable and is not economically feasible. The expense to create the building pads and the installation for the required infrastructure could not be recouped through the construction of smaller buildings. Additionally, the only access to the development of the southern portion of Tract 1 is through Wetland 1 (Figure 4). Furthermore, a large portion of the site has been impacted through grading activities and placement of fill to prepare the site for building pads and result in a large economic loss if the property were not developed.

3.2.2 Full Impact Alternative

This alternative would result in permanent impacts to all of the wetlands and streams on site. This alternative is more desirable from a development standpoint, since it allows more flexibility with site design. However, this alternative provides no minimization and avoidance of impacts to jurisdictional waters, and the extensive mitigation that would be required makes this alternative less economically feasible.

3.2.3 Proposed Design Alternative

The proposed design alternative is the most economically feasible alternative because a large portion of the site has already been graded and filled to accommodate industrial development. Impacts to jurisdictional waters and wetlands have occurred without the appropriate permits and will be mitigated for, as described in this permit application. The proposed design alternative will result in permanent impacts to Wetland 1, a portion of Wetland 3, and Ephemeral Stream 1 for the development of the southern portion of Tract 1 and Wetland 4 for the development of the northern portion of Tract 1. This alternative was determined to be the least environmentally damaging practicable development alternative for the proposed project. It will result in sufficient building sizes to allow economic development of the appropriate infrastructure on both the northern and the southern portions of Tract 1. This alternative provides minimization of impacts to jurisdictional waters and other natural communities on the site through the avoidance of impacts to sensitive areas in the southeastern corner of the property (Intermittent Stream 2 and Wetlands 2 and 5), the central portion of the property (Intermittent Stream 1), and the northeastern corner of the property (Buffalo Run).

4.0 EXISTING SITE CONDITIONS AND PREVIOUS IMPACTS

On November 13, 2008 and January 8, 2009, a wetland delineation of the approximately 67-acre Tract 1 was performed by Redwing identifying waters/wetlands present on the property. The wetland delineation of the site was accomplished through documentation of the presence/absence of hydric soils, wetland hydrology, and hydrophytic vegetation per the guidelines of the 1987 USACE Manual. A jurisdictional determination of open waters, such as streams and ponds, within the project area was made based on ordinary high water mark, defined bed and bank features, and flow regimes. Soil, hydrology, and vegetation data were collected on Routine Wetland Determination Data Forms (Appendix C) for 23 points throughout the site (Figure 3). The quality of the on-site perennial and intermittent streams was assessed using the Rapid Bioassessment Protocol (RBP) developed by the U.S. Environmental Protection Agency. Completed RBP data forms are attached as Appendix D. A Preliminary Jurisdiction Determination form is attached as Appendix E.

A large portion of the site has been affected by filling and grading activities. The remainder of the property consists primarily of open fields dominated by upland vegetation (Figure 2). Three emergent wetlands and four drainages running north/south are located on the project site (Figure 3). The central drainage is characterized by one intermittent stream and two emergent wetlands. Previously impacted features include one emergent wetland and two ephemeral streams. Additionally, approximately 135 linear feet of intermittent stream was temporarily impacted by past filling and grading activities and is being restored. The southeastern drainage includes one intermittent stream, one emergent wetland and one previously impacted emergent wetland. The northern drainage is a perennial stream (Buffalo Run) with no additional associated water/wetland features. The fourth drainage is a very short ephemeral stream (Ephemeral Stream 1) which flows into Buffalo Run in the east-central portion of the property.

The location and extent of the previously impacted water/wetland features, which include Ephemeral Streams 1 and 2 and Wetlands 4 and 5, were determined from comparisons of 2006 aerial photographs (Figure 2), a topographic survey from 1998 (Figure 3), and in-house and field research. On-site waters/wetlands, including existing features and those present prior to unauthorized filling, are depicted in Figure 3 and described in detail below.

Table 1: Summary of Jurisdictional Waters/Wetlands

Feature	Quality	Stream Length (ft)	Area (acres)	Status
Buffalo Run	Poor	765	0.25	Jurisdictional
Perennial Stream Total		**765**	**0.25**	
Intermittent Stream 1	Poor	225	0.026	Jurisdictional
Intermittent Stream 1**	Poor	135	0.015	Jurisdictional
Intermittent Stream 2	Poor	260	0.018	Jurisdictional
Intermittent Stream Total		**620**	**0.06**	
Ephemeral Stream 1	----	15	0.001	Jurisdictional
Ephemeral Stream 1*	----	25	0.001	Jurisdictional
Ephemeral Stream 2*	----	65	0.002	Jurisdictional
Ephemeral Stream Total		**105**	**0.004**	
Wetland 1	----	---	0.10	Jurisdictional
Wetland 2	----	---	0.08	Jurisdictional
Wetland 3	----	---	0.07	Jurisdictional
Wetland 4*	----	---	0.85	Jurisdictional
Wetland 5*	----	---	0.28	Jurisdictional
Wetland Total		**---**	**1.38**	
Total Jurisdictional Waters		**1,490**	**1.69**	

Notes: *= Has been impacted by past filling and grading activities.
**= Has been temporarily impacted and is being restored.

4.1 PERENNIAL STREAM

Buffalo Run is a perennial stream that is located in the northeastern portion of the property. Buffalo Run is depicted as a blue-line stream on the USGS Topographic Quad Map (Figure 1). The length of the stream found within the property boundary for Tract 1 is 765 linear feet (0.25 acre). The channel is approximately 12 to 16 feet wide with 12 to 16 foot bank heights and a substrate consisting primarily of silt, gravel and cobble (shale). The U.S. Environmental Protection Agency's (USEPA) *Rapid Bioassessment Protocols* (RBP) methodology, as described by Barbour et al. 1999, was used to assess Buffalo Run (Appendix D). Buffalo Run rated "Poor" in overall stream condition per the *Methods for Assessing Biological Integrity of Surface Waters in Kentucky* (February 2008, Revision 3). This determination was validated by field observations of the fair amount of epifaunal substrate, heavy amounts of embeddedness, channel alternations, moderate deposition of sediment, and channelization of the stream. All these factors contribute to the overall poor quality of the stream.

4.2 INTERMITTENT STREAMS

Two intermittent streams totaling approximately 620 linear feet (0.06 acre) were identified during the field delineation. The streams are depicted on Figure 3 and described in more detail below.

Intermittent Stream 1 is 360 linear feet long (0.041 acre). The stream enters the property from the west and flows northeast through the central portion of the property before exiting the property at the eastern property line and flowing into Buffalo Run. Intermittent Stream 1 is depicted as a blue-line stream on the USGS Topographic Quad Map (Figure 1). This feature is approximately four to six-feet wide with approximately one to two-foot bank heights. Substrate consists primarily of silt, gravel, and cobble. The RBP assessment described the stream as "poor" quality based on lack of epifaunal substrate, channel straightening, and lack of riparian corridor. Because a portion of the steam has been temporarily impacted by past filling and grading activities, an RBP assessment was conducted at an upstream, off-site location along the stream that appeared more natural and contained a wooded riparian corridor to identify the quality of the stream prior to the temporary impacts. Based upon the off-site RBP assessment score of 131, this stream was characterized as "poor" quality because of the lack of epifaunal substrate, the high amount of embeddedness, and the lack of riffles and pools.

During the delineation it was determined that approximately 135 linear feet of Intermittent Stream 1 was impacted by past filling and grading activities. It is presently being restored. Fill that had fallen into the stream channel during the filling and grading activities has been removed, and the streambanks have been stabilized, seeded and mulched with clean straw.

The straight section of Intermittent Stream 1 in the southwest portion of the property presently functions more like a linear wetland and was considered Wetland 3 during Redwing's water/wetland delineation on November 13, 2008.

Intermittent Stream 2 is 260 linear feet long (0.018 acre). The stream is found along the southeastern property boundary. Intermittent Stream 2 enters the property from the southern boundary and flows northwest before exiting along the eastern property line and enters Buffalo Run. Intermittent Stream 2 is not shown on the USGS Topographic Quad Map (Figure 1). It appears to have been constructed as a drainage channel at the time of the development of the Cedar Grove Business Park. This feature is approximately two to four-feet wide with approximately one to two-foot bank heights. Substrate consists primarily of gravel, cobble, and bedrock. The RBP score assessed the stream as "poor" quality based on the straight, down cut channel, lack of epifaunal substrate and lack of riparian vegetation.

4.3 EPHEMERAL STREAMS

Two ephemeral streams totaling 105 linear feet (0.004) were identified as having been on the site. One ephemeral stream has previously been filled while the other has been partially filled. The lengths and

widths of these ephemeral streams have been calculated using field research, a previous topographic survey, and historic aerial photographs (Figure 3). The streams are described in more detail below.

Ephemeral Stream 1 is located in the central portion of site. Approximately 25 feet (0.001 acre) of this stream has been filled while approximately 15 feet (0.001 acre) remain. Ephemeral Stream 1 was approximately two feet wide with gravel, cobble substrate and flows north off the property into Buffalo Run. Based on the remaining channel conditions and location in the watershed, this feature appears to only flow in response to rain events. This stream is considered poor quality.

Ephemeral Stream 2 was located in the central portion of site. This stream was approximately 65 feet long (0.002 acre) and flowed east from the filled Wetland 4 into Intermittent Stream 1. Ephemeral Stream 2 was approximately 2 feet wide. Based on the remaining channel conditions and location in the watershed, this feature appears to only flow in response to rain events. This stream is considered poor quality.

4.4 WETLANDS

Five emergent wetlands were identified on site; two of which have been impacted by past filling and grading activities (Wetlands 4 and 5). Wetlands 1-3 and 5 are found in the southern portion of the site and Wetland 4 is located in the central portion of the site. All five wetlands are considered jurisdictional due their connection with other jurisdictional waters directly or through a conveyance. The wetland delineation assessed site characteristics in terms of soil, hydrology, and vegetation, as discussed below.

Soils: Based on the Soil Survey Geographic Database of Bullitt County, Kentucky (1986), the site is underlain by Caneyville silt loam, Lawrence silt loam, McGary silt loam, Newark silt loam, and Trappist silt loam (Figure 6). Lawrence, McGary, and Newark silt loams are listed on the Bullitt County Hydric Soils List as having inclusions of hydric soil. Soils were examined at numerous locations in addition to the 16 formal data points. The remaining series are classified as upland soils. Soil test pits dug during the wetland delineation generally confirmed the mapped series.

Hydrology: The main sources of hydrology to this site appear to be the perennial stream Buffalo Run, potential overbanking of the two intermittent streams, precipitation, and surface runoff from adjacent properties. Indicators of wetland hydrology observed during the delineation included saturated soil, surface inundation, sulfidic odor, drainage patterns, the FAC neutral test, and the presence of oxidized root channels. The northern and central portions of the site are within the 100-year floodplain. The remainder of the site is located outside of the 100-year floodplain (Figure 7). Adjacent upland areas on the site were well-drained showing no indicators of wetland hydrology.

Vegetation: The site is dominated by open field habitat. Common species observed in this habitat include Canada goldenrod (*Solidago canadensis*), Johnson grass (*Sorghum halepense*), white heath aster (*Aster ericoides*), red clover (*Trifolium pratense*), field garlic (*Allium vineale*), common plantain (*Plantago major*), annual ragweed (*Ambrosia artemisiifolia*), broom sedge

(*Andropogon virginicus*), Korean lespedeza (*Lespedeza stipulacea*), Japanese honeysuckle (*Lonicera japonica*), tall fescue (*Festuca arundinacea*), blackberry (*Rubus allegheniensis*) and eastern red cedar (*Juniperus virginiana*). These species are listed as facultative upland (FACU) and upland (UPL) in the *National List of Plant Species that Occur in Wetlands* (Reed, 1988).

Common species observed in the wetland areas include rough cockle-bur (*Xanthium strumarium*), Frank's sedge (*Carex cf. frankii*), blunt spikerush (*Eleocharis obtusa*), Devil's beggar-ticks (*Bidens frondosa*), and soft rush (*Juncus effusus*). These species are listed as facultative (FAC), facultative wetland (FACW), and obligate wetland (OBL) in Reed (1988).

5.0 PROPOSED PROJECT IMPACTS

Potential project impacts were evaluated through assessment of the extent and quality of on-site jurisdictional wetlands and streams and potential presence of protected species or their critical habitat. The proposed site development plan and associated impacts are shown in Figure 4

5.1 PREVIOUS WATER/WETLAND IMPACTS

Unauthorized impacts have occurred to jurisdictional waters/wetlands on the project site due to filling and grading activities. These previous impacts include 90 linear feet of ephemeral stream and 1.13 acres of emergent wetland (Figure 3) and are summarized in the following table. Additionally, approximately 135 linear feet of intermittent stream have been temporarily impacted and are presently in the process of being restored. Proposed compensatory mitigation for these impacts is addressed in Section 6.0 of this joint permit application.

Table 2: Summary of Previous Water/Wetland Impacts

Previous Impacts		
Feature	**Stream Length (ft)**	**Area (acres)**
Intermittent Stream 1*	135	0.015
Intermittent Stream Total	**0**	**0.000**
Ephemeral Stream 1	25	0.001
Ephemeral Stream 2	65	0.002
Ephemeral Stream Total	**90**	**0.003**
Wetland 4	---	0.85
Wetland 5	---	0.28
Wetland Total	**---**	**1.13**
Total Jurisdictional Waters Previously Impacted	**90**	**1.13**

Note: *= Has been temporarily impacted and is being restored.

5.2 PROPOSED ADDITIONAL WATER/WETLAND IMPACTS

Construction of the proposed project will result in additional impacts to approximately 15 feet (0.001 acre) of Ephemeral Stream 1 and 0.10 acre of jurisdictional emergent wetlands (Figure 4) bringing total proposed jurisdictional water/wetland impacts to 105 linear feet (0.004 acre) of ephemeral stream and 1.23 acres of emergent wetland. These additional impacts are summarized in the following table. Proposed compensatory mitigation for these impacts is addressed in Section 6.0 of this joint permit application.

Table 3: Summary of Water/Wetland Impacts

Previous Impacts		
Feature	**Stream Length (ft)**	**Area (acres)**
Intermittent Stream 1*	135	0.015
Intermittent Stream Total	**0**	**0.000**
Ephemeral Stream 1	25	0.001
Ephemeral Stream 2	65	0.002
Ephemeral Stream Total	**90**	**0.003**
Wetland 4	---	0.85
Wetland 5	---	0.28
Wetland Total	**---**	**1.13**
Total Jurisdictional Waters Previously Impacted	**90**	**1.13**
Proposed Impacts		
Feature	**Stream Length (ft)**	**Area (acres)**
Ephemeral Stream 1	15	0.001
Ephemeral Stream Total	**15**	**0.00**
Wetland 1	---	0.10
Wetland 3	---	0.004
Wetland Total	**---**	**0.10**
Total Jurisdictional Waters Proposed Impacts	**15**	**0.10**
Total Impacts		
Total Ephemeral Stream Impacts	**105**	**0.003**
Total Wetland Impacts	**---**	**1.23**
Total Jurisdictional Waters Impacts	**105**	**1.23**

Note: *= Has been temporarily impacted and is being restored.

5.3 PROTECTED SPECIES

A protected species habitat survey of the property, conducted as part of the overall site assessment, concluded that the proposed project is not likely to have an adverse impact on any federally threatened or endangered species, or their preferred habitat. The U.S. Fish and Wildlife Service (USFWS) lists five threatened or endangered species that may be present within Bullitt County and are shown in the table below.

Table 4: Threatened and Endangered Species of Bullitt County, Kentucky

Species	Common Name	Status	Habitat Present ?	Species Observed?
Mammals				
Myotis grisescens	Gray Bat	E	No	No
Myotis sodalis	Indiana Bat	E	No	No
Mussel				
Obovaria retusa	Ring Pink	E	No	No
Plethobasus cooperianus	Orange-foot Pimpleback	E	No	No
Pleurobema clava	Clubshell	E	No	No

E = Federally Endangered Species

Redwing coordinated with USFWS through a phone conversation and emails regarding potential Indiana bat roosting and foraging habitat and gray bat foraging habitat along Buffalo Run. In an email to Mr. Phil DeGarmo of the USFWS on October 27, 2008, Redwing stated that there was one small area of potential Indiana bat habitat trees on top of a hill which was isolated from Buffalo Run by approximately 1,100 feet of open field. Redwing sent pictures of the site and stated that, due to isolation, it is unlikely the stand of trees provided suitable habitat for the bat. It is our understanding that the riparian corridor along Buffalo Run in the east central portion of the property will not be impacted and may provide potential foraging habitat for gray and Indiana bats. Redwing requested concurrence from the USFWS that the proposed project would not have any adverse effects on threatened or endangered species or their habitat.

Following coordination with the USFWS on October 27, 2008, the landowner cleared the small area of trees (after the October 15 clearing date); however, Redwing was unaware of the activity until October 29, 2008. Redwing sent an email to the USFWS on November 3, 2008 advising them of the activity The remainder of the McGruder Property – Tract 1 has either been graded and filled or is open field and is not suitable habitat for the Indiana bat. This project is not likely to have an adverse impact on either species of bat.

Buffalo Run on the Tract 1 property has been impaired from upstream construction activities, channel relocation, and by the widening of HWY 480. The creek is rated as “poor” quality and does not provide suitable habitat for any endangered mussels.

Based on the field habitat survey, the proposed project is not likely to have an adverse impact on any federally threatened/endangered species or their critical habitat.

5.4 CULTURAL RESOURCES

Presently, there are no known cultural historic or archaeological sites listed on the National Register of Historic Places (NRHP) on the McGruder Property – Tract 1. One building, formerly used for a daycare, is located along the western property boundary in the northern portion of the property. The Rolling Acres Farm Cemetery, located in the south-central portion of the property was relocated on September 19, 2008, to the Cedar Grove Cemetery and the Maraman Family Cemetery in Bullitt County, Kentucky. Six graves were moved during the relocation with appropriate permits from the Bullitt County Fiscal Court. A public notice for this action was published on August 9, 2007. All paperwork pertaining to the cemetery relocation is attached as Appendix H. A Phase I archaeological survey of the site has not been conducted.

6.0 CONCEPTUAL MITIGATION PLAN

A Conceptual Mitigation Plan has been developed to provide compensation for unavoidable impacts to approximately 1.23 acres of jurisdictional waters/wetlands associated with the proposed development of the McGruder Property – Tract 1, including 1.23 acres of emergent wetland and 105 linear feet (0.003 acre) of ephemeral stream. Mitigation for the above-described emergent wetland impacts will include the purchase of 2.50 acres of wetland mitigation credits from an approved wetland mitigation bank. Mitigation for ephemeral stream impacts will be provided for through the stormwater management system designed for the project. Additionally, approximately 135 linear feet of intermittent stream were temporarily impacted and are being restored. This proposed Conceptual Mitigation Plan follows the current USACE Louisville District Mitigation Guidelines (issued April 10, 2008), and the Federal *Compensatory Mitigation for Losses of Aquatic Resource, Final Rule* (April 10, 2008). This plan includes a discussion of impact minimization/avoidance, credit determination and proposed restoration activities for the temporary impacts to Intermittent Stream 1.

6.1 MINIMIZATION / AVOIDANCE

Impacts to jurisdictional waters/wetlands on site have been minimized and avoided to as great an extent possible based on size and quality. Overall, the proposed development of Tract 1 will avoid permanent impacts to perennial and intermittent streams located on site, as well as Wetland 2. While a majority of the on-site wetlands and all of the on-site ephemeral streams will be impacted by the project, the low quality and disturbed status of these features minimizes the loss of functions and values of these features.

6.2 CREDIT DETERMINATION

Mitigation credit required to compensate for the unavoidable loss of streams and wetlands on this project has been calculated based on size and quality as summarized below:

Feature	Quantity of Impacts	Quality	Mitigation Ratio	Mitigation Required
Ephemeral Stream	105 feet	Poor	__	Stormwater system
Emergent Wetland	1.23 acres	Poor	2.0	2.46 acres ~2.50 acres

The wetland credits will be purchased from an approved wetland mitigation bank in Nelson County, Kentucky.

6.3 INTERMITTENT RESTORATION ACTIVITIES

As described in this joint permit application, approximately 135 linear feet of Intermittent Stream 1 were temporarily impacted by past filling and grading activities. Any fill that was placed within the bed and banks of the Intermittent Stream 1 channel has been removed, and the streambanks have been stabilized, seeded, and mulched with clean straw. The applicant will plant an approximately 50-foot wide riparian corridor, 25 feet along each bank of Intermittent Stream 1, with high quality woody trees and shrubs for 135 linear feet. Based upon correspondence with the USACE, it is Redwing's understanding that monitoring of the successful establishment of woody tree and shrub species will not be required.

7.0 CONCLUSION

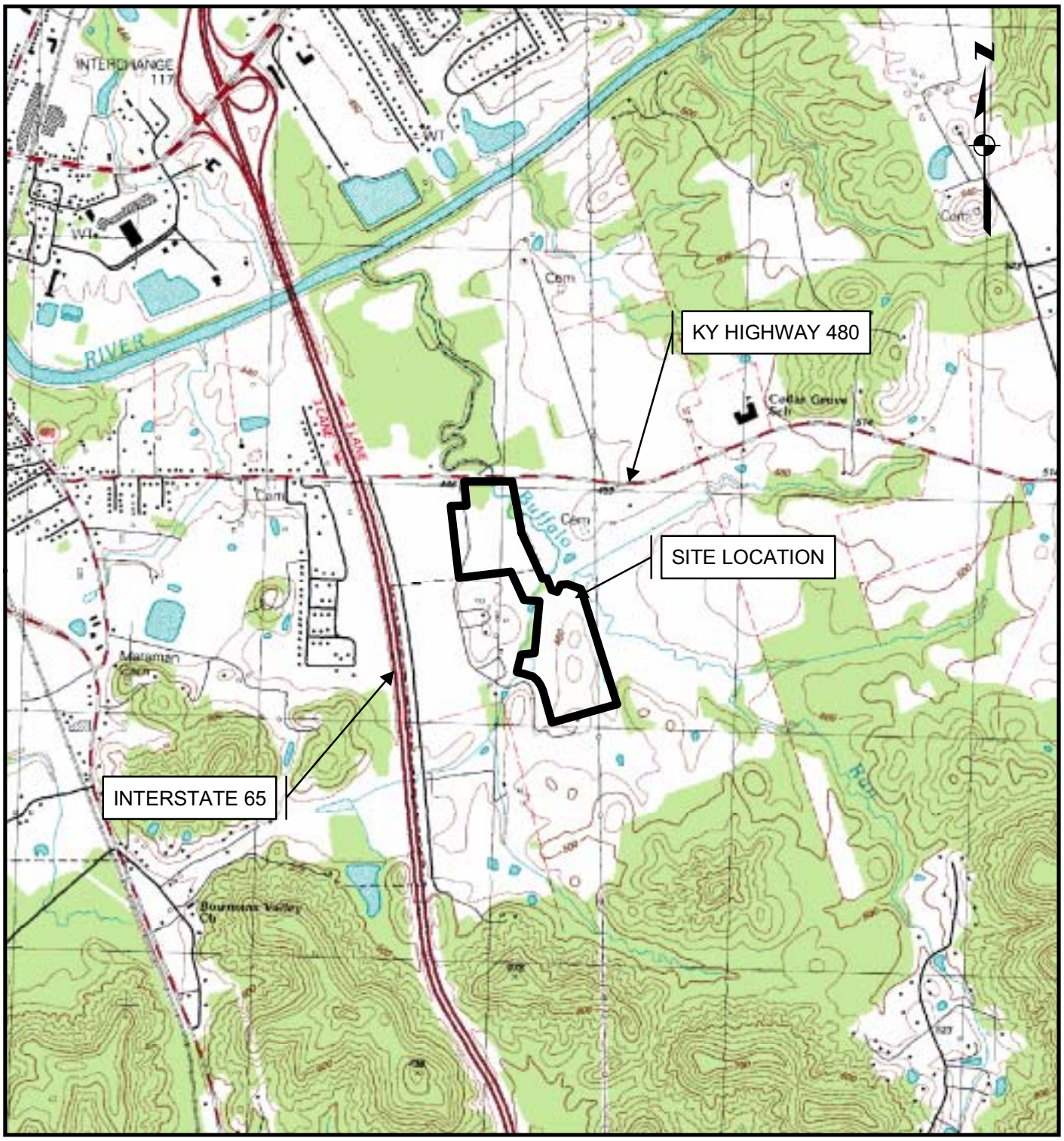
This joint application for a Section 404 After-The-Fact Individual Permit and Section 401 Water Quality Certification has been prepared on behalf of Rolling Acres Farm, LLC, for the proposed development of the McGruder Property – Tract 1. The approximately 67-acres project site is located south of Kentucky Highway 480 and east of Buffalo Run Boulevard. The purpose of the development is to provide new industrial opportunities along the Interstate 65/Hwy 480 corridor.

From the water/wetland delineation conducted on November 13, 2008 and January 8, 2009 and in-house research, it was determined that unauthorized impacts to jurisdictional waters/wetlands of the U.S. have occurred and include the filling of approximately 90 linear feet (0.003 acre) of ephemeral stream and two emergent wetlands totaling 1.13 acres. Additionally, approximately 135 linear feet of intermittent stream have been temporarily impacted and are being restored. The proposed development will result in additional unavoidable jurisdictional impacts to two emergent wetlands totaling 0.10 acre and 15 linear feet (0.001 acre) of ephemeral stream. These additional impacts will result in total jurisdictional impacts, including unauthorized and proposed, of 105 linear feet (0.004 acre) of ephemeral stream and 1.23 acres of emergent wetland.

Proposed mitigation for the above-described emergent wetland impacts will include the purchase of 2.50 acres of wetland mitigation credits from an approved wetland mitigation bank in Nelson County, Kenutcky. Mitigation for ephemeral stream impacts will be provided for through the stormwater management system designed for the project.

FIGURES

Source: USGS 7.5-minute topographic imagery from kygeonet.ky.gov - Shepherdsville, KY



MCGRUDER PROPERTY - TRACT 1
BULLITT COUNTY, KENTUCKY

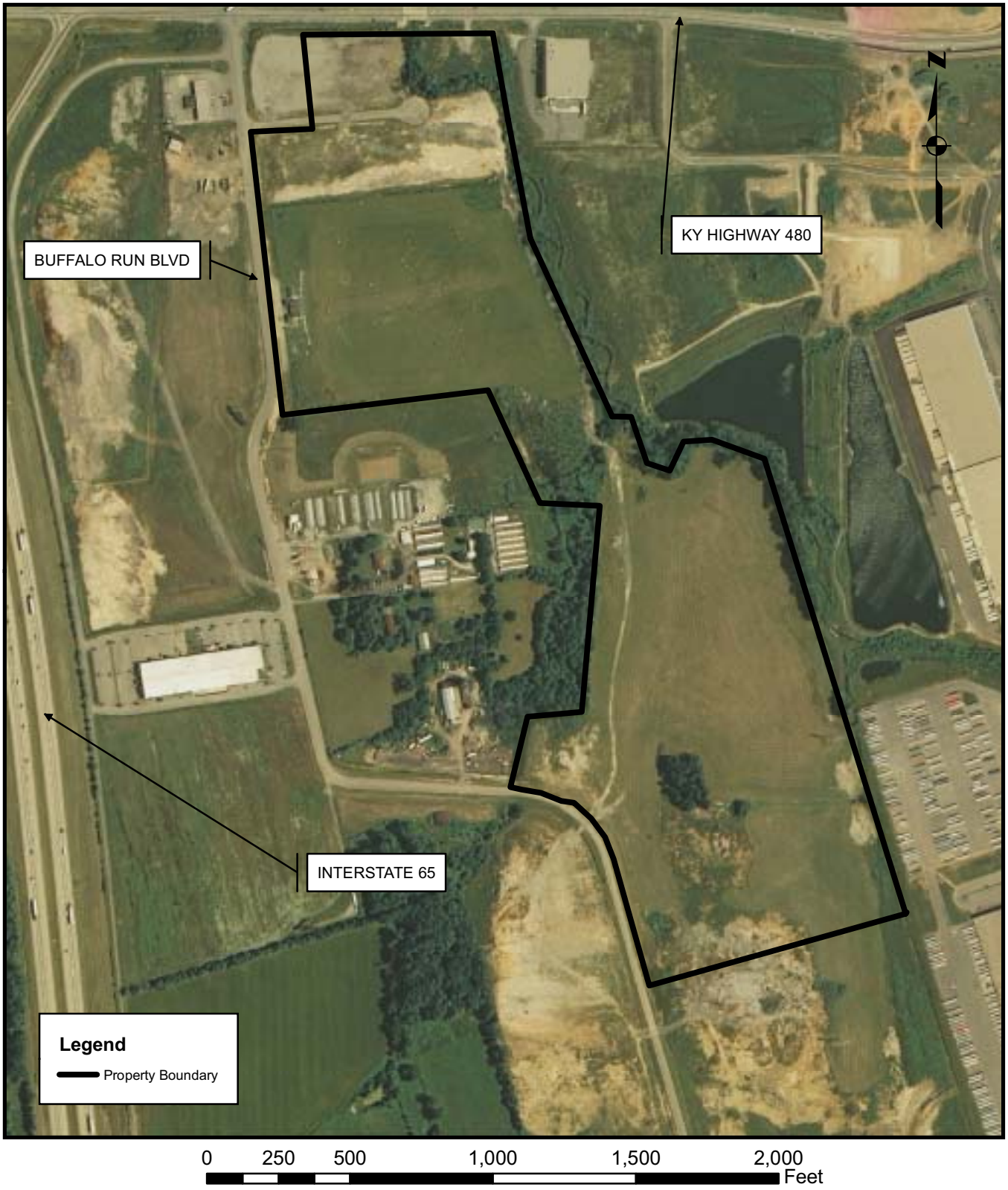
SITE LOCATION MAP

FIGURE 1

FILE: Redwing/08-096/Figures/Tract1/SiteLocation	
REDWING PROJECT 08-096	
REVISED DATE 12.19.08	DRAWN BY LAD/BJD

REDWING
ECOLOGICAL SERVICES, INC.

Source: FSA NAIP Ortho Photo Imagery (2006)



MCGRUDER PROPERTY - TRACT 1
BULLITT COUNTY, KENTUCKY

AERIAL PHOTOGRAPHY MAP

FILE: Redwing/Figures/Tract 1/AerialPhotographyMap	
REDWING PROJECT 08-096	
REVISED DATE 12.19.08	DRAWN BY BMA/BJD

REDWING
ECOLOGICAL SERVICES, INC.

FIGURE 2

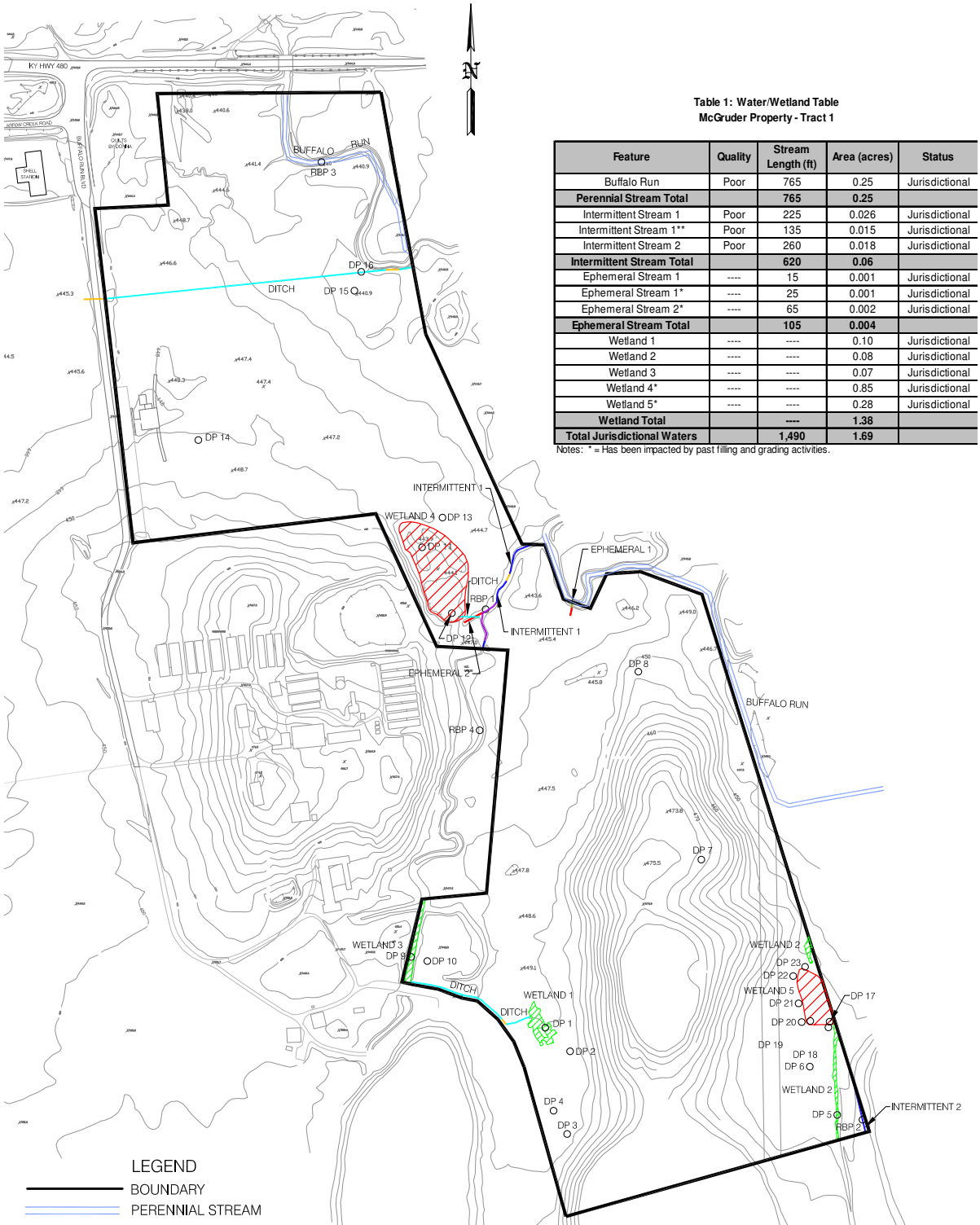


Table 1: Water/Wetland Table
McGruder Property - Tract 1

Feature	Quality	Stream Length (ft)	Area (acres)	Status
Buffalo Run	Poor	765	0.25	Jurisdictional
Perennial Stream Total		**765**	**0.25**	
Intermittent Stream 1	Poor	225	0.026	Jurisdictional
Intermittent Stream 1**	Poor	135	0.015	Jurisdictional
Intermittent Stream 2	Poor	260	0.018	Jurisdictional
Intermittent Stream Total		**620**	**0.06**	
Ephemeral Stream 1	----	15	0.001	Jurisdictional
Ephemeral Stream 1*	----	25	0.001	Jurisdictional
Ephemeral Stream 2*	----	65	0.002	Jurisdictional
Ephemeral Stream Total		**105**	**0.004**	
Wetland 1	----	----	0.10	Jurisdictional
Wetland 2	----	----	0.08	Jurisdictional
Wetland 3	----	----	0.07	Jurisdictional
Wetland 4*	----	----	0.85	Jurisdictional
Wetland 5*	----	----	0.28	Jurisdictional
Wetland Total		**----**	**1.38**	
Total Jurisdictional Waters		**1,490**	**1.69**	

Notes: * = Has been impacted by past filling and grading activities.

LEGEND

- BOUNDARY
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL STREAM
- DITCH
- CULVERT
- WETLAND
- APPROXIMATE EXTENT OF IMPACTED EPHEMERAL STREAM FEATURE
- APPROXIMATE EXTENT OF TEMPORARILY IMPACTED INTERMITTENT STREAM FEATURE
- APPROXIMATE EXTENT OF IMPACTED WETLAND
- RBP 1 RAPID BIOASSESSMENT POINT
- DP 1 DATA POINT

300 150 0 300
SCALE IN FEET

SOURCE: BASE MAP PROVIDED BY MINDEL, SCOTT AND ASSOCIATES, INC.

NOTE: JURISDICTIONAL WATER/WETLAND BOUNDARIES WERE DELINEATED AND SURVEYED USING GLOBAL POSITIONING SYSTEM EQUIPMENT BY REDWING WETLAND SCIENTISTS ON NOVEMBER 13, 2008 AND JANUARY 8, 2009. THESE BOUNDARIES WERE DISCUSSED WITH THE U.S. ARMY CORPS OF ENGINEERS IN A MEETING ON JANUARY 22, 2009. IN THE MEETING IT WAS AGREED THAT THE EXTENT OF THE DELINEATED FEATURES PRESENTED ABOVE IS THE BEST REPRESENTATION OF THE JURISDICTIONAL WATER/WETLAND FEATURES THAT ARE PRESENTLY LOCATED ON THE MCGRUDER PROPERTY - TRACT 1, AS WELL AS THE EXTENT OF WATER/WETLAND FEATURES THAT WERE LIKELY PRESENT PRIOR TO FILLING AND GRADING ACTIVITIES. USE OF THIS MAP IS FOR PRELIMINARY PLANNING PURPOSES ONLY.

MCGRUDER PROPERTY - TRACT 1
BULLITT COUNTY, KENTUCKY

FILENAME: \Figures\Tract1\Water wetland rev per USACE meet 1-22-09
PROJECT No.: 08-096 DRAWN BY: BMA/BJD
REVISED DATE: 02-16-2009

REDWING ECOLOGICAL SERVICES, INC.

WATER/WETLAND LOCATION MAP

FIGURE: 3

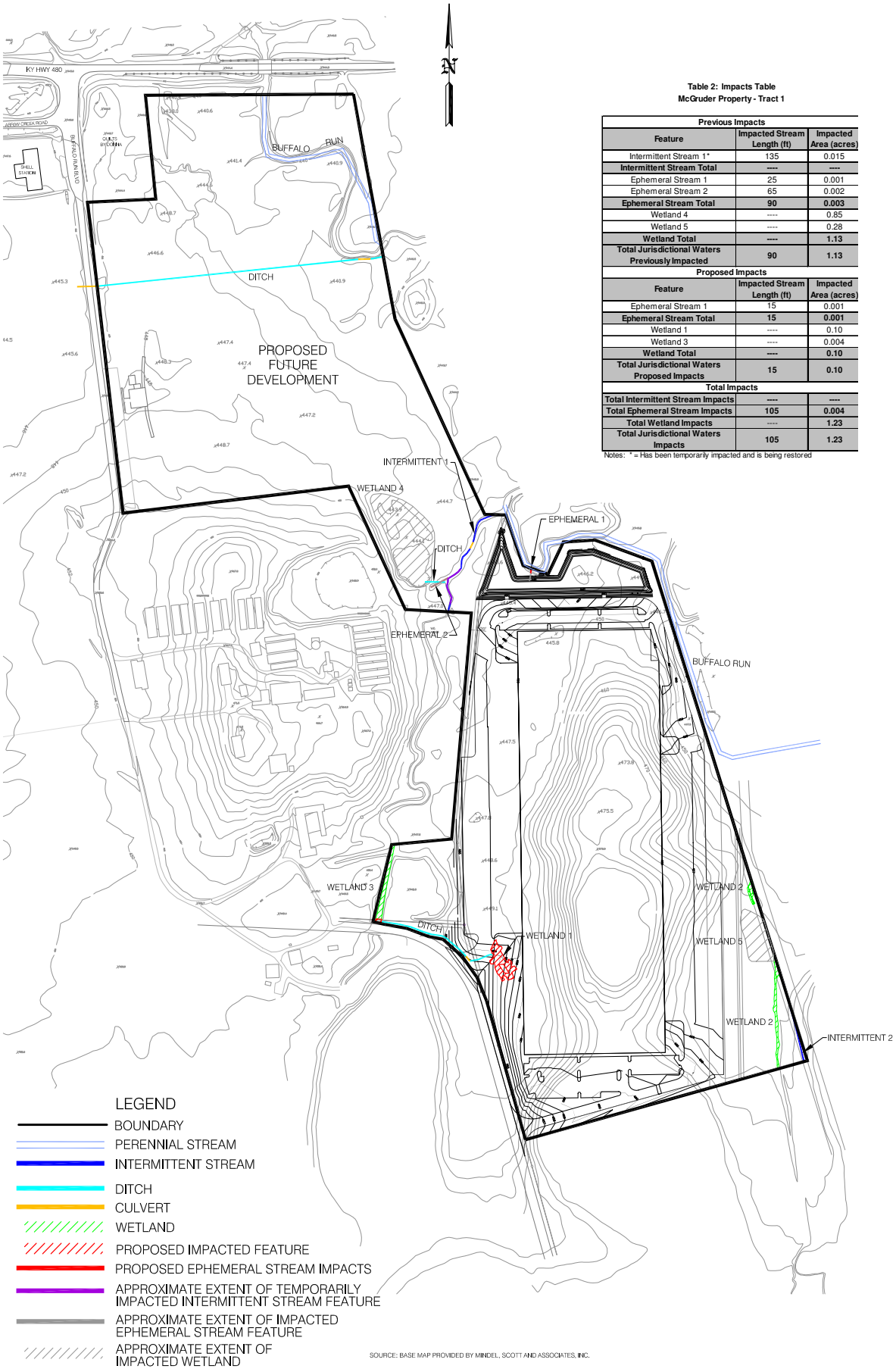


Table 2: Impacts Table
McGruder Property - Tract 1

Previous Impacts		
Feature	**Impacted Stream Length (ft)**	**Impacted Area (acres)**
Intermittent Stream 1*	135	0.015
Intermittent Stream Total	**----**	**----**
Ephemeral Stream 1	25	0.001
Ephemeral Stream 2	65	0.002
Ephemeral Stream Total	**90**	**0.003**
Wetland 4	----	0.85
Wetland 5	----	0.28
Wetland Total	**----**	**1.13**
Total Jurisdictional Waters Previously Impacted	**90**	**1.13**
Proposed Impacts		
Feature	**Impacted Stream Length (ft)**	**Impacted Area (acres)**
Ephemeral Stream 1	15	0.001
Ephemeral Stream Total	**15**	**0.001**
Wetland 1	----	0.10
Wetland 3	----	0.004
Wetland Total	**----**	**0.10**
Total Jurisdictional Waters Proposed Impacts	**15**	**0.10**
Total Impacts		
Total Intermittent Stream Impacts	**----**	**----**
Total Ephemeral Stream Impacts	**105**	**0.004**
Total Wetland Impacts	**----**	**1.23**
Total Jurisdictional Waters Impacts	**105**	**1.23**

Notes: * = Has been temporarily impacted and is being restored

LEGEND

- BOUNDARY
- PERENNIAL STREAM
- INTERMITTENT STREAM
- DITCH
- CULVERT
- WETLAND
- PROPOSED IMPACTED FEATURE
- PROPOSED EPHEMERAL STREAM IMPACTS
- APPROXIMATE EXTENT OF TEMPORARILY IMPACTED INTERMITTENT STREAM FEATURE
- APPROXIMATE EXTENT OF IMPACTED EPHEMERAL STREAM FEATURE
- APPROXIMATE EXTENT OF IMPACTED WETLAND

SOURCE: BASE MAP PROVIDED BY MINDEL, SCOTT AND ASSOCIATES, INC.

300 150 0 300
SCALE IN FEET

MCGRUDER PROPERTY - TRACT 1
BULLITT COUNTY, KENTUCKY

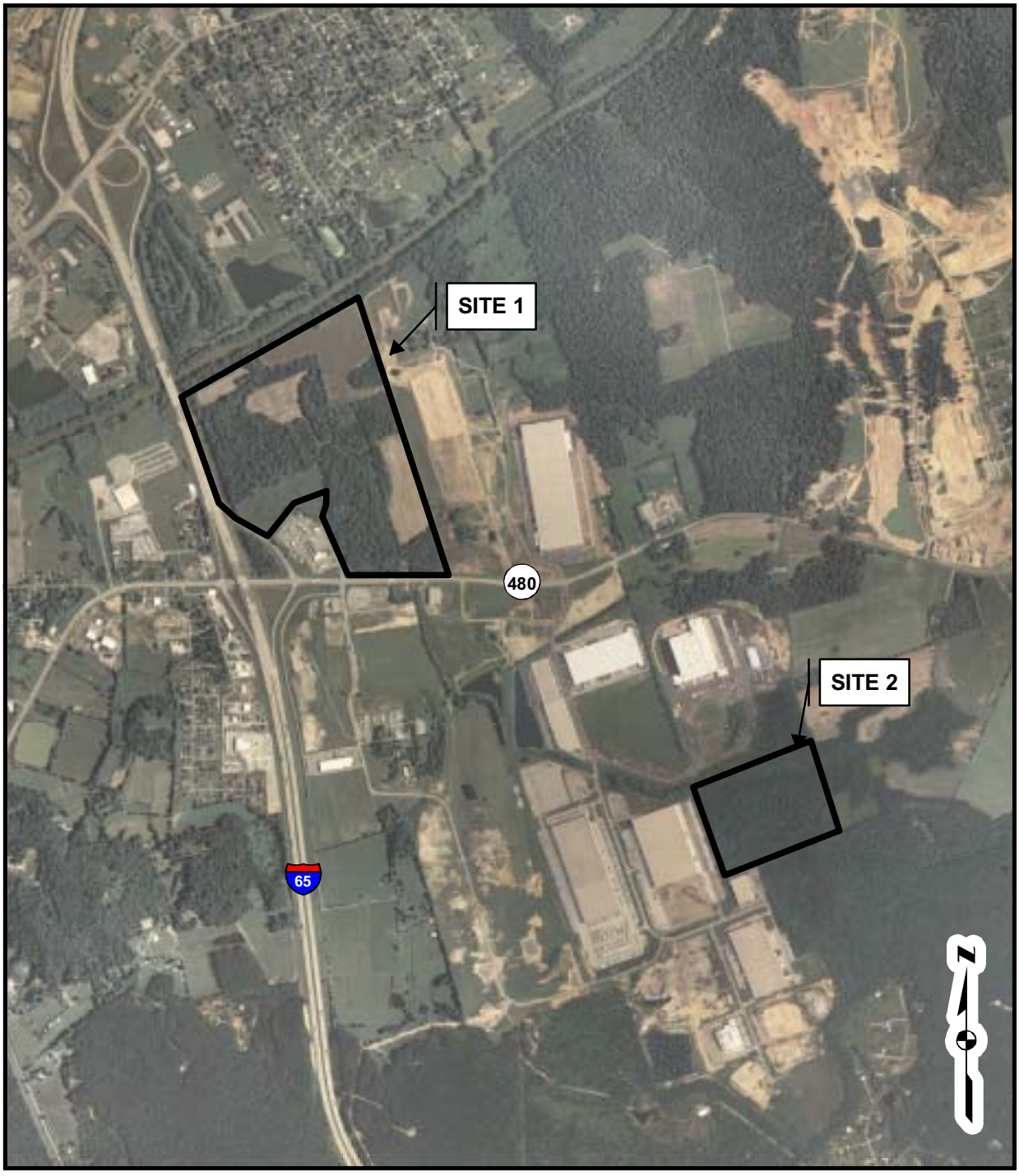
FILENAME: \Figures\Tract1\Site development - rev per USACE meet 1-22-09
PROJECT No.: 08-096 DRAWN BY: BMA/BJD
REVISED DATE: 02-16-2009

REDWING ECOLOGICAL SERVICES, INC.

SITE DEVELOPMENT PLAN

FIGURE: 4

SOURCE: FSA NAIP Ortho Photo Imagery for Kentucky (2006)



0 1,000 2,000 4,000 6,000 8,000 Feet

MCGRUDER PROPERTY - TRACT 1
BULLITT COUNTY, KENTUCKY

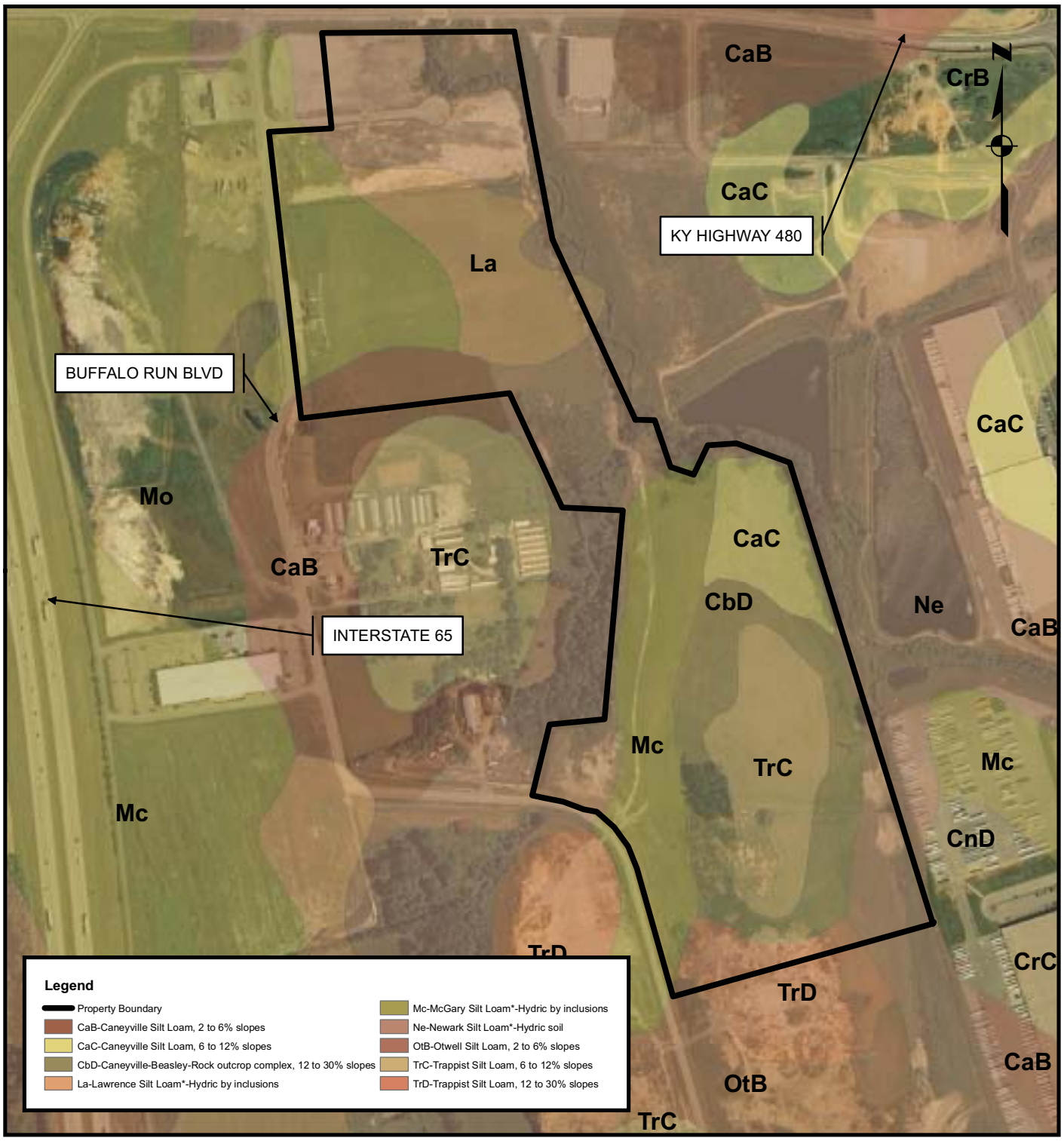
REDWING PROJECT 08-096

REDWING ECOLOGICAL SERVICES, INC.

OFF-SITE ALTERNATIVE
LOCATION MAP

FIGURE 5

Source: Soil Survey of Bullitt County, KY; FSA NAIP Ortho Imagery 2006



MCGRUDER PROPERTY - TRACT 1
BULLITT COUNTY, KENTUCKY

SOIL SURVEY MAP

FILE: Redwing/Figures/Tract 1/Soils

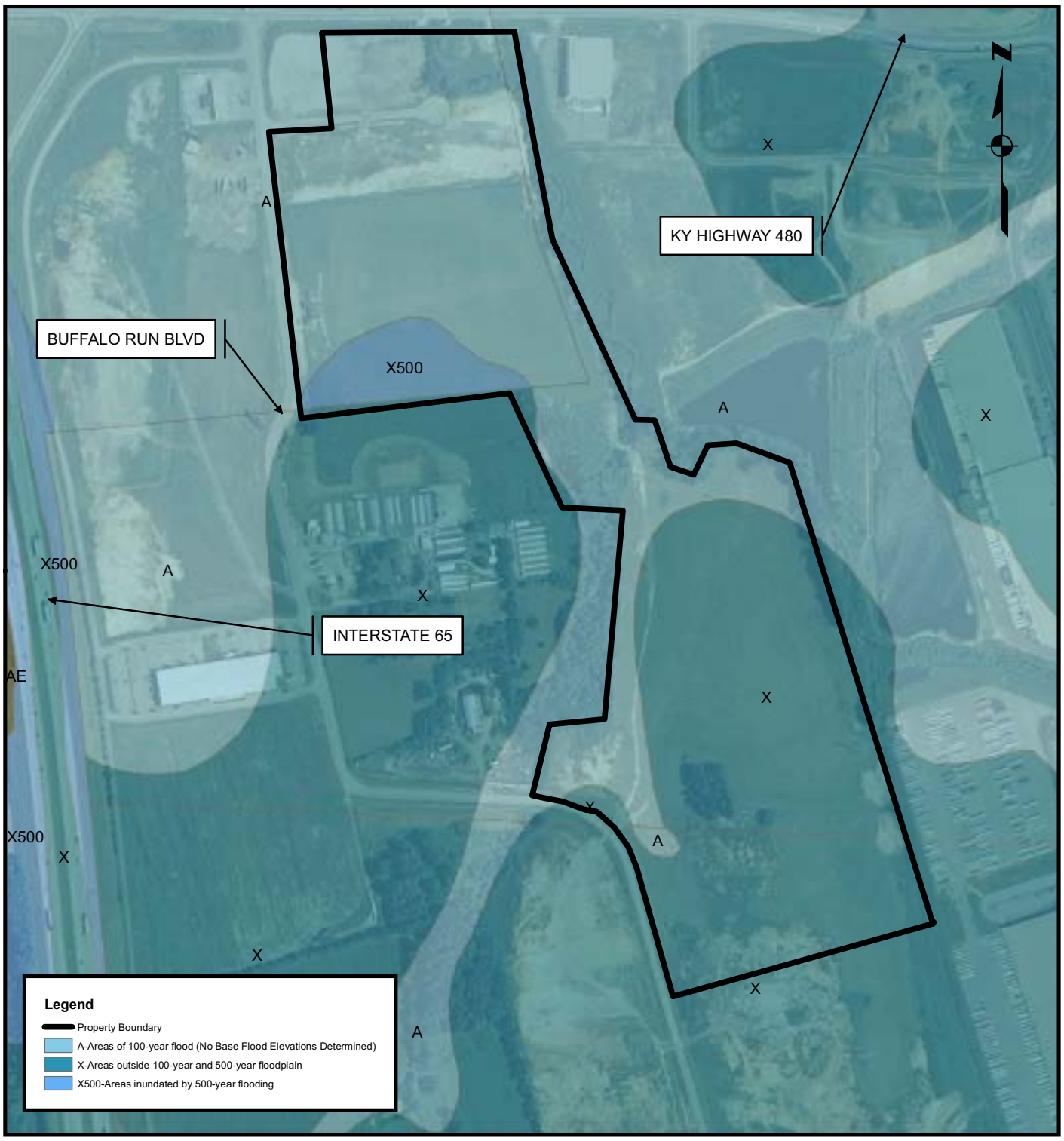
REDWING PROJECT 08-096

REVISED DATE 12.19.08 | DRAWN BY BJD

REDWING ECOLOGICAL SERVICES, INC.

FIGURE 6

Source: FEMA Q3 Flood Data; FSA NAIP Ortho Imagery 2006



0 500 1,000 1,500 2,000 Feet

MCGRUDER PROPERTY - TRACT 1
BULLITT COUNTY, KENTUCKY

FILE: Redwing/Figures/Tract 1/FEMA

REDWING PROJECT 08-096

REVISED DATE 12.19.08 | DRAWN BY BJD

REDWING ECOLOGICAL SERVICES, INC.

FEMA FLOODPLAIN MAP

FIGURE 7

PHOTOGRAPHS

Photograph 1: View facing northwest of typical open field habitat found throughout the site. McGruder Property – Tract 1. November 13, 2008.

Photograph 2: View of Wetland 1 found in southwestern portion of site. Edge of fill seen on right side of photograph. McGruder Property – Tract 1. November 13, 2008.

Photograph 3: Upland open field habitat found in south-central portion of site. McGruder Property – Tract 1. November 13, 2008.

Photograph 4: Intermittent Stream 2 found in southeastern corner of site. Intermittent 2 connects to Wetlands 2 and 5 making them jurisdictional. McGruder Property – Tract 1. November 13, 2008.

Photograph 5: View facing south of emergent Wetland 2, immediately west of Intermittent Stream 1. McGruder Property – Tract 1. November 13, 2008.

Photograph 6: View of Wetland 5 in southeastern corner of site. McGruder Property – Tract 1. November 13, 2008.

Photograph 7: Wetland 3 looking north in southwestern portion of site. This wetland was dominated by such species as rough barnyard grass (*Echinochloa muricata*) and black willow (*Salix nigra*). McGruder Property – Tract 1. November 13, 2008.

Photograph 8: View of Intermittent 1 looking west. This portion of the stream was temporarily impacted by past filling and grading activities but is being restored. McGruder Property – Tract 1. November 13, 2008.

Photograph 9: View looking southeast of impacted Wetland 4. Intermittent Stream 1 can be seen in the background flowing to the left. McGruder Property – Tract 1. November 13, 2008.

Photograph 10: View of southern portion of fill activities involving Wetland 4. McGruder Property – Tract 1. November 13, 2008.

Photograph 11: View of ditch found in central portion of site. Ephemeral Stream 2 and Wetland 4 were found here prior to impact. McGruder Property – Tract 1. November 13, 2008.

Photograph 12: View looking east along ditch that flows from former Wetland 4 into Intermittent Stream 1. McGruder Property – Tract 1. November 13, 2008.

Photograph 13: Open field habitat found in northern portion of site. This area is dominated by such species as tall fescue (*Festuca arundinacea*) and common plantain (*Plantago major*). McGruder Property – Tract 1. November 13, 2008.

Photograph 14: View looking east of ditch in northern portion of site. Edge of fill area can be seen on left side. McGruder Property – Tract 1. November 13, 2008.

Photograph 15: Northern portion of site looking west. Area has been historically filled. McGruder Property – Tract 1. November 13, 2008.

Photograph 16: Perennial stream Buffalo Run found in the northeastern portion of the property. The stream was historically re-routed. McGruder Property – Tract 1. November 13, 2008.

APPENDIX A

PERMIT APPLICATION FORMS
DEPARTMENT OF ARMY PERMIT APPLICATION AND
SECTION 401 WATER QUALITY CERTIFICATION

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT (33 CFR 325)	OMB APPROVAL NO. 0710-003 Expires October 1996

Public reporting burden for this collection of information is estimated to average 5 hours per response, including the time for reviewing instructions, searching existing existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authority: 33 USC 401, Section 10; 1413, Section 404. Principal Purpose: These laws require permits authorizing activities in, or affecting navigable waters of the United States, the discharge of dredged or fill materials into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Routine Uses: Information provided on this form will be used in evaluating the application for a permit. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME Mr. Gary McGruder Rolling Acres Farm, LLC	8. AUTHORIZED AGENT'S NAME AND TITLE *(an agent is not required)* Redwing Ecological Services, Inc.
6. APPLICANT'S ADDRESS 960 South Preston Highway Shepherdsville, Kentucky 40165	9. AGENT'S ADDRESS 1139 South Fourth Street Louisville, KY 40203
7. APPLICANT'S PHONE NOS. W/AREA CODE	10. AGENT'S PHONE NOS. W/AREA CODE
a. Residence b. Business (502) 955-7011	a. Residence b. Business (502) 625-3009

11. STATEMENT OF AUTHORIZATION

I hereby authorize, Redwing Ecological Services, Inc. to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

Gary McGruder — APPLICANT'S SIGNATURE

19/Feb/2009 — DATE

NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE *(see instructions)*

McGruder Property - Tract 1

13. NAME OF WATERBODY, IF KNOWN *(if applicable)*	14. PROJECT STREET ADDRESS *(if applicable)*
Buffalo Run and unnamed tributaries to Buffalo Run	Property is located east of Interstate 65 in the southeast quadrant of the intersection of Buffalo Run Boulevard and Kentucky Highway 480 in Bullitt County, Kentucky.
15. LOCATION OF PROJECT Bullitt (COUNTY) Kentucky (STATE)	

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN *(see instructions)*
The site is bound to the north by Kentucky Highway 480, to the east by the Cedar Grove Industrial Park, to the west by Buffalo Run Boulevard and to the south by undeveloped land.

17. DIRECTIONS TO THE SITE
I-65 South to Kentucky Highway 480 (exit 116). Go east on Park 480 (left at bottom of exit ramp). Travel approximately 0.3 miles east on Kentucky Highway 480 and turn right on Buffalo Run Boulevard. Travel approximately 0.1 mile south on Buffalo Run Boulevard. The northern portion of the Site will be on left (east side of Buffalo Run Boulevard). Travel approximately 0.6 mile further south on Buffalo Run Boulevard. The southern portion of the Site will be on left (east side of Buffalo Run Boulevard).

18. Nature of Activity *(Description of project, include all features)*
The proposed development of the McGruder Property - Tract 1 involves the construction of light industrial/warehouse facilities with associated roads, parking and infrastructure.

19. Project Purpose *(Describe the reason or purpose of the project, see instructions)*

The purpose of this project is to provide needed light industrial/warehouse development along the I-65 corridor in Bullitt County, Kentucky.

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge
The proposed project will include impacts to jurisdictional streams and wetlands. These areas will be permanently impacted through construction of buildings, roads, parking, utilities, detention basins and site development activities.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards

Clean fill material obtained on site will be used to fill jurisdictional waters. Approximately 6,200 cubic yards of fill will be required.

22. Surface Area in Acres of Wetlands or Other Waters Filled *(see instructions)*

Impacts associated with the project include both unauthorized impacts and proposed future impacts necessary for project implementation. The total jurisdictional, unauthorized and proposed impacts, include 1.23 acres of emergent wetland and 105 linear feet (0.004 acre) of ephemeral stream. Additionally, approximately 135 linear feet of intermitent stream have been temporarily impacted by filling and grading activities but are being restored.

23. Is Any Portion of the Work Already Complete? Yes __X__ No _____ IF YES, DESCRIBE THE COMPLETED WORK

Portions of the Site have already been filled, including unauthorized impacts to 90 linear feet (0.003 acre) of ephemeral stream and 1.13 acres of wetland. Additionally, approximately 135 linear feet of intermitent stream have been temporarily impacted by filling and grading activities but are being restored.

24. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).
Please see Appendix B of the Individual Permit package.

25. List of Other Certifications or Approvals/Denials Received from other Federal, State or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED

*Would include but is not restricted to zoning, building and flood plain permits.

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this Application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

Gary McGruder 19/FEB/2009

SIGNATURE OF APPLICANT DATE SIGNATURE OF AGENT DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES & ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRNOMENTAL PROTECTION
DIVISION OF WATER

APPLICATION FOR PERMIT TO CONSTRUCT ACROSS OR ALONG A STREAM AND / OR WATER QUALITY CERTIFICATION

Chapter 151 of the Kentucky Revised Statutes requires approval from the Division of Water prior to any construction or other activity in or along a stream that could in any way obstruct flood flows or adversely impact water quality. *If the project involves work in a stream, such as bank stabilization, dredging or relocation, you will also need to obtain a 401 Water Quality Certification (WQC) from the Division of Water.* This completed form will be forwarded to the Water Quality Branch for WQC processing. The project may not start until all necessary approvals are received from the KDOW. For questions concerning the WQC process, contact the WQC section at 502/564-3410.

If the project will disturb more than 1 acre of soil, you will also need to complete the attached Notice of Intent for Storm Water Discharges, and return both forms to the Floodplain management Section of the KDOW. This general permit will require you to create and implement an erosion control plan for the project.

1. **OWNER:** Rolling Acres Farm, LLC
   c/o Mr. Gary McGruder
   Give name of person(s), company, governmental unit, or other owner of proposed project.

   MAILING ADDRESS: 960 South Preston Highway
   Shepherdsville, KY 40165

   TELEPHONE #: (502) 955-7011 **EMAIL:** gary@2mtractor.com

2. **AGENT:** Redwing Ecological Services, Inc.
   c/o Mr. Brad Anderson
   Give name of person(s) submitting application, if other than owner.

   ADDRESS: 1139 S. 4th Street , Louisville, KY 40203

   TELEPHONE #: (502) 625-3009 **EMAIL:** banderson@redwing.win.net

3. **ENGINEER:** **P.E. NUMBER:**
   Contact Division of Water if waiver can be granted.
   TELEPHONE #: _____ **EMAIL:**

4. **DESCRIPTION OF CONSTRUCTION:** The proposed McGruder Property – Tract 1 project involves the development of light industrial/warehouse facilities with associated roads, parking, and infrastructure.
   Describe the type and purpose of construction and describe stream impact

5. **COUNTY:** Bullitt **NEAREST COMMUNITY:** Shepherdsville

6. **USGS QUAD NAME:** Shepherdsville
   LATITUDE/LONGITUDE: N 37.9743° W 85.6890°

7. **STREAM NAME:** Buffalo Run and unnamed tributaries to Buffalo Run

   WATERSHED SIZE (in acres): Approx. 2,060

8. **LINEAR FEET OF STREAM IMPACTED:** 105 feet (0.004 acre) of ephemeral stream and 1.23 acres of emergent wetland.

9. **DIRECTIONS TO SITE:** Take I-65 South to Kentucky Highway 480 (Exit 116). Turn left onto Kentucky Highway 480 (east). Travel approximately 0.3 mile east on Kentucky Highway 480 and turn right on Buffalo Boulevard. Travel approximately 0.1 mile south on Buffalo Run Boulevard. The northern portion of the Site will be on left (east side of Buffalo Run Boulevard. Travel approximately 0.6 mile further south on Buffalo Run Boulevard and the southern portion of the site will be on left (east side of Buffalo Run Boulevard).

10. **IS ANY PORTION OF THE REQUESTED PROJECT NOW COMPLETE?** [X] Yes [ ] No If yes, identify the completed portion on the drawings you submit and indicate the date activity was completed. DATE: Portions of the Site have already been filled, including unauthorized impacts to 90 linear feet (0.003) acre of ephemeral stream and 1.13 acres of emergent wetland. Additionally, approximately 135 linear feet (0.015 acre) of intermittent stream have been temporarily impacted by filling and grading activities but are being restored.

11. **ESTIMATED BEGIN CONSTRUCTION DATE:** June 2009

12. **ESTIMATED END CONSTRUCTION DATE:** June 2011

13. **HAS A PERMIT BEEN RECEIVED FROM THE US ARMY, CORPS of ENGINEERS?** ☐ Yes ☒ No If yes, attach a copy of that permit.

14. **THE APPLICANT *MUST* ADDRESS PUBLIC NOTICE:**

(a) PUBLIC NOTICE HAS BEEN GIVEN FOR THIS PROPOSAL BY THE FOLLOWING MEANS:

X Public notice in newspaper having greatest circulation in area (provide newspaper clipping or affidavit)

____ Adjacent property owner(s) affidavits (Contact Division of Water for requirements.)

(b) __ I REQUEST WAIVER OF PUBLIC NOTICE BECAUSE:

Contact Division of Water for requirements.

15. **I HAVE CONTACTED THE FOLLOWING CITY OR COUNTY OFFICIALS CONCERNING THIS PROJECT:**

Give name and title of person(s) contacted and provide copy of any approval city or county may have issued.

16. **LIST OF ATTACHMENTS:** Joint 404 After-The-Fact Individual Permit / 401 Water Quality Certification Application Package

List plans, profiles, or other drawings and data submitted. Attach a copy of a 7.5 minute USGS topographic map clearly showing the project location.

17. **I,** CAM (owner) **CERTIFY THAT THE OWNER OWNS OR HAS EASEMENT RIGHTS ON ALL PROPERTY ON WHICH THIS PROJECT WILL BE LOCATED OR ON WHICH RELATED CONSTRUCTION WILL OCCUR** (for dams, this includes the area that would be impounded during the design flood).

18. **REMARKS:**

I hereby request approval for construction across or along a stream as described in this application and any accompanying documents. To the best of my knowledge, all the information provided is true and correct.

SIGNATURE: Owner or Agent sign here. (If signed by Agent, a Power of Attorney should be attached.)

DATE: 19 Feb 2009

SIGNATURE OF LOCAL FLOODPLAIN COORDINATOR:

Permit application will be returned to applicant if not properly endorsed by the local floodplain coordinator.

DATE:

SUBMIT APPLICATION AND ATTACHMENTS TO:

Floodplain Management Section
Division of Water
14 Reilly Road
Frankfort, KY 40601

APPENDIX B

LIST OF ADJOINING PROPERTY OWNERS

Adjoining Property Owners

House of Quilts
142a Buffalo Run Road
Shepherdsville, Kentucky 40165

Shell Food Mart
151 Buffalo Run Road
Shepherdsville, Kentucky 40165

Donna Sharp Inc.
1315 Cedar Grove Road
Shepherdsville, Kentucky 40165

Jerry Thomas
460 Buffalo Run Road
Shepherdsville, Kentucky 40165

Arthur Estes
504 Buffalo Run Road
Shepherdsville, Kentucky 40165

Salt River Development
1213 Outer Loop
Louisville, Kentucky 40219

BDHM Inc.
960 South Preston Highway
Shepherdsville, Kentucky 40165

Rolling Acres Farm, LLC
960 South Preston Highway
Shepherdsville, Kentucky 40165

APPENDIX C

WETLAND DETERMINATION FORMS

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1
Applicant/Owner: Rolling Acres Farm, LLC
Investigator: B. Anderson, B. Deetsch

Date: 11/13/2008
County: Bullitt
State: Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: DP1

Location: Southwestern portion of site, within Wetland 1

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Xanthium strumarium**	herb	FAC	9.		
2. *Carex cf. frankii**	herb	OBL	10.		
3. *Eleocharis obtusa**	herb	OBL	11.		
4. *Echinochloa muricata**	herb	FACW+	12.		
5. *Polygnum cf. hydropiperoides**	herb	OBL	13.		
6. *Juncus effusus*	herb	FACW+	14.		
7. *Typha latifolia*	herb	OBL	15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: The hydrophytic vegetation criterion has been met.
*Indicates dominant species

HYDROLOGY

Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
____ Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
X Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
X FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP1

SOILS

Map Unit Name
(Series and Phase): McGary Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Aeric Epiaqualfs Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-4	A	10YR4/2	none	Silty Clay Loam
4-14	B	10YR6/1	common medium distinct 10YR6/8	Clay

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
__X__ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [Yes] No (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

Is this Sampling Point Within a Wetland? [Yes] No (Circle)

Remarks: Due to the presence of all three wetland criteria, this data point is located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1
Applicant/Owner: Rolling Acres Farm, LLC
Investigator: B. Anderson, B. Deetsch

Date: 11/13/2008
County: Bullitt
State: Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: DP2

Location: Southwestern portion of site, upland adjacent to Wetland 1

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Festuca arundinacea**	herb	FACU	9.		
2. *Setaria faberi*	herb	UPL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0%

Remarks: The hydrophytic vegetation criterion has not been met.
*Indicates dominant species

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
____ Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
X Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
____ FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has not been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP2

SOILS

Map Unit Name
(Series and Phase): McGary Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Aeric Epiaqualfs Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-3	A	10YR4/4	none	Silt Loam
3-14	B	10YR4/3	common medium faint 10YR5/4	Silt Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has not been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? Yes [No]
Hydric Soils Present? Yes [No]

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of all three wetland criteria, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	McGruder Property - Tract 1	Date:	11/13/2008
Applicant/Owner:	Rolling Acres Farm, LLC	County:	Bullitt
Investigator:	B. Anderson, B. Deetsch	State:	Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID:
Transect ID:
Plot ID: DP3

Location: Southwestern corner of site, east of Buffalo Run Blvd

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Xanthium strumarium**	herb	FAC	9.		
2. *Carex cf. frankii**	herb	OBL	10.		
3. *Solidago canadensis*	herb	FACU	11.		
4. *Festuca arundinacea*	herb	FACU	12.		
5. *Ranunculus sp.*	herb		13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: The hydrophytic vegetation criterion has been met.
*Indicates dominant species

HYDROLOGY

Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)

Depth to Free Water in Pit: NA (in.)

Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ____ Oxidized Root Channels in Upper 12 inches
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- X FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has not been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP3

SOILS

Map Unit Name
(Series and Phase): McGary Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Aeric Epiaqualfs Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-14	A	10YR4/3	none	Silt Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has not been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	[Yes]	No	(Circle)
Wetland Hydrology Present?	Yes	[No]	
Hydric Soils Present?	Yes	[No]	

Is this Sampling Point Within a Wetland? Yes [No] (Circle)

Remarks: Due to the absence of wetland hydrology and hydric soils, this data point is not located within a wetland.

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	McGruder Property - Tract 1	Date:	11/13/2008
Applicant/Owner:	Rolling Acres Farm, LLC	County:	Bullitt
Investigator:	B. Anderson, B. Deetsch	State:	Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID:
Transect ID:
Plot ID: DP4

Location: Southern corner of site, north of DP 3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Setaria faberi**	herb	UPL	9.		
2. *Polygnum cf. hydropiperoides**	herb	OBL	10.		
3. *Bidens frondosa*	herb	FACW	11.		
4. *Echinochloa muricata*	herb	FACW+	12.		
5. *Carex cf. frankii*	herb	OBL	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50%

Remarks: The hydrophytic vegetation criterion has not been met.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
__X__ No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has not been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP4

SOILS

Map Unit Name
(Series and Phase): McGary Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Aeric Epiaqualfs Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-6	A	10YR4/3	none	Silt Loam
6-14	B	10YR4/3	common medium faint 10YR4/4	Silt Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has not been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? Yes [No]
Hydric Soils Present? Yes [No]

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of all three wetland criteria, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	McGruder Property - Tract 1	Date:	11/13/2008
Applicant/Owner:	Rolling Acres Farm, LLC	County:	Bullitt
Investigator:	B. Anderson, B. Deetsch	State:	Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID:
Transect ID:
Plot ID: DP5

Location: Southeastern corner of site, in Wetland 2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Scirpus atrovirens**	herb	OBL	9.		
2. *Juncus effusus**	herb	FACW+	10.		
3. *Festuca arundinacea*	herb	FACU	11.		
4. *Aster sp.*	herb		12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: The hydrophytic vegetation criterion has been met.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
X Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
X FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP5

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-4	A	10YR4/3	common medium distinct 7.5YR5/8	Silt Loam
4-14	B	10YR5/2	common medium distinct 10YR5/8 + common medium distinct 7.5YR5/5	Silt Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
__X__ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [Yes] No (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

Is this Sampling Point Within a Wetland? [Yes] No (Circle)

Remarks: Due to the presence of all three wetland criteria, this data point is located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1
Applicant/Owner: Rolling Acres Farm, LLC
Investigator: B. Anderson, B. Deetsch

Date: 11/13/2008
County: Bullitt
State: Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: DP6

Location:Southeastern portion of site, upland adjacent to Wetland 2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Andropogon virginicus**	herb	FACU	9.		
2. *Plantago major**	herb	FACU	10.		
3. *Solidago canadensis*	herb	FACU	11.		
4. *Festuca arundinacea*	herb	FACU	12.		
5. *Allium vineale*	herb	FACU-	13.		
6. *Daucus carota*	herb	UPL	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 0%

Remarks: The hydrophytic vegetation criterion has not been met.
*Indicates dominant species

HYDROLOGY

Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
____ Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
____ Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
____ FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has not been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP6

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-14	A	10YR4/3	none	Silt Clay Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has not been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? Yes [No]
Hydric Soils Present? Yes [No]

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of all three wetland criteria, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	McGruder Property - Tract 1	Date:	11/13/2008
Applicant/Owner:	Rolling Acres Farm, LLC	County:	Bullitt
Investigator:	B. Anderson, B. Deetsch	State:	Kentucky

Do Normal Circumstances exist on the site?	Yes	No	Community ID:
Is the site significantly disturbed (Atypical Situation)?	Yes	No	Transect ID:
Is the area a potential Problem Area?	Yes	No	Plot ID: DP7
(If needed, explain on reverse.)			

Location: South-central portion of site, west of power line easement

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Setaria faberi**	herb	UPL	9.		
2. *Festuca arundinacea*	herb	FACU	10.		
3. *Plantago major*	herb	FACU	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0%

Remarks: The hydrophytic vegetation criterion has not been met.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
__X__ No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)

Depth to Free Water in Pit: NA (in.)

Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has not been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP7

SOILS

Map Unit Name
(Series and Phase): Trappist Silt Loam Drainage Class: Well Drained

Taxonomy (Subgroup): Typic Hapludults Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-4	A	10YR4/4	none	Silt Loam
4-13	B	10YR5/6	none	Silt Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has not been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? Yes [No]
Hydric Soils Present? Yes [No]

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of all three wetland criteria, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1
Applicant/Owner: Rolling Acres Farm, LLC
Investigator: B. Anderson, B. Deetsch

Date: 11/13/2008
County: Bullitt
State: Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: DP8

Location: Central portion of site, near fill area

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Festuca arundinacea**	herb	FACU	9.		
2. *Plantago lanceolata*	herb	UPL	10.		
3. *Allium vineale*	herb	FACU-	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0%

Remarks: The hydrophytic vegetation criterion has not been met.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
__X__ No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has not been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP8

SOILS

Map Unit Name
(Series and Phase): Caneyville Silt Loam Drainage Class: Well Drained

Taxonomy (Subgroup): Typic Hapludalfs Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-6	A	10YR4/3	none	Silt Loam
6-14	B	7.5YR4/6	none	Silt Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has not been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? Yes [No]
Hydric Soils Present? Yes [No]

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of all three wetland criteria, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	McGruder Property - Tract 1	Date:	11/13/2008
Applicant/Owner:	Rolling Acres Farm, LLC	County:	Bullitt
Investigator:	B. Anderson, B. Deetsch	State:	Kentucky

Do Normal Circumstances exist on the site?	Yes	No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	Yes	No	Transect ID:	
Is the area a potential Problem Area?	Yes	No	Plot ID:	DP9
(If needed, explain on reverse.)				

Location: Southwestern portion of site, in Wetland 3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Echinochloa muricata**	herb	FACW+	9.		
2. *Salix nigra**	shrub	FACW+	10.		
3. *Typha latifolia*	herb	OBL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: The hydrophytic vegetation criterion has been met.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 2 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators

Primary Indicators
X Inundated
X Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
X FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP9

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-13	A	Gley 1/4 5GY	none	Silt Clay Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
__X__ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [Yes] No (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

Is this Sampling Point Within a Wetland? [Yes] No (Circle)

Remarks: Due to the presence of all three wetland criteria, this data point is located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	McGruder Property - Tract 1	Date:	11/13/2008
Applicant/Owner:	Rolling Acres Farm, LLC	County:	Bullitt
Investigator:	B. Anderson, B. Deetsch	State:	Kentucky

Do Normal Circumstances exist on the site?	Yes	No	Community ID:
Is the site significantly disturbed (Atypical Situation)?	Yes	No	Transect ID:
Is the area a potential Problem Area?	Yes	No	Plot ID: DP10
(If needed, explain on reverse.)			

Location: Southwestern portion of site, upland east of Wetland 3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Allium vineale**	herb	FACU-	9.		
2. *Festuca arundinacea**	herb	FACU-	10.		
3. *Plantago lanceolata**	herb	UPL	11.		
4. *Sorghum halepense**	herb	FACU	12.		
5. *Rumex crispus**	herb	FACU	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 0%

Remarks: The hydrophytic vegetation criterion has not been met.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
__X__ No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)

Depth to Free Water in Pit: NA (in.)

Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has not been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP10

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-13	A	10YR4/4	many medium distinct 10YR4/2 + few common distinct 10YR4/2	Silt Clay Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has not been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? Yes [No]
Hydric Soils Present? Yes [No]

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of all three wetland criteria, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1
Applicant/Owner: Rolling Acres Farm, LLC
Investigator: B. Anderson, B. Deetsch

Date: 11/13/2008
County: Bullitt
State: Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: DP11

Location: Central portion of site, in Wetland 4

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Carex cf. frankii**	herb	OBL	9.		
2. *Fraxinus pennsylvanica**	shrub	FACW	10.		
3. *Acer rubrum*	shrub	FAC	11.		
4. *Sambucus canadensis*	shrub	FACW-	12.		
5. *Typha latifolia*	herb	OBL	13.		
6. *Juncus effusus*	herb	FACW+	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: The hydrophytic vegetation criterion has been met.
*Indicates dominant species

HYDROLOGY

X Recorded Data (Describe in Remarks):
- Stream, Lake, or Tide Gauge
- X Aerial Photographs
- Other

No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
- Inundated
- Saturated in Upper 12 Inches
- Water Marks
- Drift Lines
- Sediment Deposits
- Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- X Oxidized Root Channels in Upper 12 inches
- Water-Stained Leaves
- Local Soil Survey Data
- X FAC-Neutral Test
- X Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has been met.
Area has been disturbed. Aerial photograph shows area historically held water.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP11

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-3	A	10YR5/4	none	Silt Loam
3-9	AB	10YR5/4	common medium distinct 5YR4/6	Silt Loam
9-14	B1	10YR4/2	many medium distinct 10YR6/8	Silt Clay Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
__X__ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [Yes] No (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

Is this Sampling Point Within a Wetland? [Yes] No (Circle)

Remarks: Due to the presence of all three wetland criteria, this data point is located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	McGruder Property - Tract 1	Date:	11/13/2008
Applicant/Owner:	Rolling Acres Farm, LLC	County:	Bullitt
Investigator:	B. Anderson, B. Deetsch	State:	Kentucky

Do Normal Circumstances exist on the site?	Yes	No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	Yes	No	Transect ID:	
Is the area a potential Problem Area?	Yes	No	Plot ID:	DP12
(If needed, explain on reverse.)				

Central portion of site, in Wetland 4

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. no vegetation			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)

Remarks: The hydrophytic vegetation criterion has been met.
No vegetation found. Area has been highly disturbed. Hydrophytic vegetation assumed present prior to grading activities.
*Indicates dominant species

HYDROLOGY

X Recorded Data (Describe in Remarks):
- Stream, Lake, or Tide Gauge
- X Aerial Photographs
- Other

No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)

Depth to Free Water in Pit: NA (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators

Primary Indicators
- Inundated
- X Saturated in Upper 12 Inches
- Water Marks
- Drift Lines
- Sediment Deposits
- Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- Oxidized Root Channels in Upper 12 inches
- Water-Stained Leaves
- Local Soil Survey Data
- FAC-Neutral Test
- X Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has been met.
Area has been disturbed. Aerial photograph shows area historically held water.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP12

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-3	A	10YR5/3	many medium distinct Gley 1 25/N	Clay
3-13	B	Gley 1 25/N	common coarse faint Gley 1 3/5GY	Clay

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
__X__ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [Yes] No (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

Is this Sampling Point Within a Wetland? [Yes] No (Circle)

Remarks: Due to the presence of all three wetland criteria, this data point is located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1
Applicant/Owner: Rolling Acres Farm, LLC
Investigator: B. Anderson, B. Deetsch

Date: 11/13/2008
County: Bullitt
State: Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: DP13

Location: Central portion of site, upland adjacent to Wetland 4

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Festuca arundinacea**	herb	FACU	9.		
2. *Seteria faberi**	herb	UPL	10.		
3. *Plantago lanceolata*	herb	UPL	11.		
4. *Andropogon virginicus*	herb	FACU	12.		
5. *Tridens flavus*	herb	FACU	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0%

Remarks: The hydrophytic vegetation criterion has not been met.
*Indicates dominant species

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
____ Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
____ Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
____ FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has not been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP13

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-14	A	10YR3/2	none	Silt Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? Yes [No]
Hydric Soils Present? Yes [No]

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of all three wetland criteria, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1
Applicant/Owner: Rolling Acres Farm, LLC
Investigator: B. Anderson, B. Deetsch

Date: 11/13/2008
County: Bullitt
State: Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: DP14

Location: Northern portion of site, near western prop. line

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Festuca arundinacea**	herb	FACU	9.		
2. *Rumex crispus*	herb	FACU	10.		
3. *Oxalis europaea*	herb	UPL	11.		
4. *Allium vineale*	herb	FACU-	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0%

Remarks: The hydrophytic vegetation criterion has not been met.
*Indicates dominant species

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
____ Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
____ Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
____ FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has not been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP14

SOILS

Map Unit Name
(Series and Phase): McGary Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Aeric Epiaqualfs Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-5	A	10YR3/3	none	Silt Loam
5-10	B1	10YR4/4	none	Silt Loam
10-14	B2	10YR5/4	few common distinct 10YR7/3	Silt Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has not been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? Yes [No]
Hydric Soils Present? Yes [No]

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of all three wetland criteria, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	McGruder Property - Tract 1	Date:	11/13/2008
Applicant/Owner:	Rolling Acres Farm, LLC	County:	Bullitt
Investigator:	B. Anderson, B. Deetsch	State:	Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: DP15

Location: Northeastern portion of site, south of linear ditch

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Festuca arundinacea**	herb	FACU	9.		
2. *Rubus allegheniensis**	shrub	FACU-	10.		
3. *Glecoma hederacea*	herb	FACU	11.		
4. *Carex cf. frankii*	herb	OBL	12.		
5. *Plantago lanceolata*	herb	UPL	13.		
6. *Solidago sp.*	herb		14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 0%

Remarks: The hydrophytic vegetation criterion has not been met.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
__X__ No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has not been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP15

SOILS

Map Unit Name
(Series and Phase): Lawrence Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Aquic Fragiudalfs Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-9	A	10YR4/3	none	Silt Loam
9-13	B	10YR5/4	none	Silt Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has not been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? Yes [No]
Hydric Soils Present? Yes [No]

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of all three wetland criteria, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	McGruder Property - Tract 1	Date:	11/13/2008
Applicant/Owner:	Rolling Acres Farm, LLC	County:	Bullitt
Investigator:	B. Anderson, B. Deetsch	State:	Kentucky

Do Normal Circumstances exist on the site?	Yes	No	Community ID:
Is the site significantly disturbed (Atypical Situation)?	Yes	No	Transect ID:
Is the area a potential Problem Area?	Yes	No	Plot ID: DP16
(If needed, explain on reverse.)			

Location: Northern portion of site, in linear ditch

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Typha latifolia**	herb	OBL	9.		
2. *Salix nigra**	shrub	FACW+	10.		
3. *Bidens frondosa*	herb	FACW	11.		
4. *Scirpus validus*	herb	OBL	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: The hydrophytic vegetation criterion has been met.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
__X__ No Recorded Data Available

Field Observations:

Depth of Surface Water: 2 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators

Primary Indicators
- X Inundated
- X Saturated in Upper 12 Inches
- _____ Water Marks
- _____ Drift Lines
- _____ Sediment Deposits
- _____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- X Oxidized Root Channels in Upper 12 inches
- _____ Water-Stained Leaves
- _____ Local Soil Survey Data
- X FAC-Neutral Test
- _____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP16

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-8	A	10YR5/3	common fine distinct 7.5YR5/6	Silt Clay
8-14	B	10YR4/4	many medium distinct 10YR5/3	Silt Clay

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has not been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [Yes] No (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? Yes [No]

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of hydric soils, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	McGruder Property - Tract 1	Date:	1/8/2009
Applicant/Owner:	Rolling Acres Farm, LLC	County:	Bullitt
Investigator:	B. Anderson, B. Deetsch	State:	Kentucky

Do Normal Circumstances exist on the site?	Yes	No	Community ID:	
Is the site significantly disturbed (Atypical Situation)?	Yes	No	Transect ID:	
Is the area a potential Problem Area?	Yes	No	Plot ID:	DP17
(If needed, explain on reverse.)				

Location: Within graded area near eastern property line

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. no vegetation			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)

Remarks: The hydrophytic vegetation criterion has been met.
No vegetation found. Area has been highly disturbed. Hydrophytic vegetation assumed present prior to grading activities.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
__X__ No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)

Depth to Free Water in Pit: 10 (in.)

Depth to Saturated Soil: 10 (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
__X__ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP17

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-4	A	10YR4/4	many medium distinct 5YR5/8	Silt Loam
4-10	B1	10YR4/2	none	Silt Clay Loam
10-16	B2	10YR5/2	few medium distinct 7.5YR5/6	Silt Clay Loam
16-24	B3	10YR5/2	common medium distinct 10YR5/4	Clay

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
__X__ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [Yes] No (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

Is this Sampling Point Within a Wetland? [Yes] No (Circle)

Remarks: Due to the presence of all three wetland criteria, this data point is located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1
Applicant/Owner: Rolling Acres Farm, LLC
Investigator: B. Anderson, B. Deetsch

Date: 1/8/2009
County: Bullitt
State: Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: DP18

Location: Within graded area near eastern property line

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. no vegetation			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)

Remarks: The hydrophytic vegetation criterion has been met.
No vegetation found. Area has been highly disturbed. Hydrophytic vegetation assumed present prior to grading activities.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
__X__ No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: 20 (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has not been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP18

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-5	A	10YR4/3	few fine distinct 10YR5/6	Silt Clay Loam
5-12	B1	10YR4/2	none	Silt Loam
12-20	B2	10YR4/2	common medium faint 10YR4/3	Silt Clay Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has not been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [Yes] No (Circle)
Wetland Hydrology Present? Yes [No]
Hydric Soils Present? Yes [No]

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of wetland hydrology and hydric soils, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1
Applicant/Owner: Rolling Acres Farm, LLC
Investigator: B. Anderson, B. Deetsch

Date: 1/8/2009
County: Bullitt
State: Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: DP19

Location: Within graded area near eastern property line

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. no vegetation			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-)

Remarks: The hydrophytic vegetation criterion has been met.
No vegetation found. Area has been highly disturbed. Hydrophytic vegetation assumed present prior to grading activities.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
__X__ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0.5 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators

Primary Indicators
__X__ Inundated
__X__ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
__X__ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP19

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-3	A	10YR5/4	many medium distinct 7.5YR5/8	Silt Loam
3-8	B1	10YR5/1	many medium distinct 10YR5/8	Clay
8-20	B2	10YR5/2	few fine faint 10YR5/3	Clay

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
__X__ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [Yes] No (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

Is this Sampling Point Within a Wetland? [Yes] No (Circle)

Remarks: Due to the presence of all three wetland criteria, this data point is located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1
Applicant/Owner: Rolling Acres Farm, LLC
Investigator: B. Anderson, B. Deetsch

Date: 1/8/2009
County: Bullitt
State: Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: DP20

Location: Near eastern property line, west of Wetland 2 and DP19

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Festuca arundinacea**	herb	FACU	9.		
2. *Andropogon virginicus*	herb	FACU	10.		
3. *Plantago lanceolata*	herb	UPL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0%

Remarks: The hydrophytic vegetation criterion has not been met.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators

Primary Indicators
X Inundated
_____ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
X Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP20

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-5	A	10YR5/2	none	Silt Clay Loam
5-9	B1	10YR5/2	few fine distinct 7.5YR5/8	Silt Clay Loam
9-14	B2	10YR5/2	common few distinct 7.5YR5/6	Silt Clay Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
__X__ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of hydrophytic vegetation, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1
Applicant/Owner: Rolling Acres Farm, LLC
Investigator: B. Anderson, B. Deetsch

Date: 1/8/2009
County: Bullitt
State: Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID:
Transect ID:
Plot ID: DP21

Location: West of eastern property line, north of DP20

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Festuca arundinacea**	herb	FACU	9.		
2. *Juncus effusus*	herb	FACW+	10.		
3. *Ranunculus cf. acris*	herb	FAC+	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0%

Remarks: The hydrophytic vegetation criterion has not been met.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: 5 (in.)
Depth to Saturated Soil: 5 (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
X Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
X Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP21

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-4	A	10YR5/2	none	Silt Loam
4-8	B1	10YR5/3	common medium faint 10YR/5/2	Silt Loam
8-14	B2	10YR5/3	few fine distinct 10YR5/6	Silt Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has not been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	[No]	(Circle)
Wetland Hydrology Present?	[Yes]	No	
Hydric Soils Present?	Yes	[No]	

Is this Sampling Point Within a Wetland? Yes [No] (Circle)

Remarks: Due to the absence of hydrophytic vegetation and hydric soils, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1
Applicant/Owner: Rolling Acres Farm, LLC
Investigator: B. Anderson, B. Deetsch

Date: 1/8/2009
County: Bullitt
State: Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: DP22

Location: West of eastern property line, north of DP21

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Daucus carota**	herb	UPL	9.		
2. *Plantago lancelota**	herb	UPL	10.		
3. *Trifolium repens**	herb	FACU-	11.		
4. *Festuca arundinacea*	herb	FACU	12.		
5. *Andropogon virginicus*	herb	FACU	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0%

Remarks: The hydrophytic vegetation criterion has not been met.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: 12 (in.)
Depth to Saturated Soil: 12 (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
X Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP22

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-4	A	10YR5/2	common medium distinct 10YR5/8	Clay
4-7	B1	10YR5/2	many medium distinct 10YR5/8	Clay
7-14	B2	10YR5/2	common medium distinct 7.5YR5/8	Silt Clay Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
__X__ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of hydrophytic vegetation, this data point is not located within a wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1
Applicant/Owner: Rolling Acres Farm, LLC
Investigator: B. Anderson, B. Deetsch

Date: 1/8/2009
County: Bullitt
State: Kentucky

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: DP23

Location: Near eastern property line, northeast of DP22

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Sorghum halepense**	herb	FACU	9.		
2. *Daucus carota**	herb	UPL	10.		
3. *Plantago lanceolata*	herb	UPL	11.		
4. *Allium vineale*	herb	FACU-	12.		
5. *Setaria pumila*	herb	UPL	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 0%

Remarks: The hydrophytic vegetation criterion has not been met.
*Indicates dominant species

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: 7 (in.)
Depth to Saturated Soil: 7 (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
X Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: The wetland hydrology criterion has been met.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: McGruder Property - Tract 1 Plot ID DP23

SOILS

Map Unit Name
(Series and Phase): Newark Silt Loam Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): Fluventic Endoaquepts Field Observations Confirm Mapped Type? [Yes] No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-3	A	10YR5/3	few fine distinct 7.5YR5/8	Silt Clay Loam
3-6	B1	10YR5/3	few medium distinct 10YR5/6	Silt Clay Loam
6-10	B2	10YR5/2	common medium faint 10YR5/4 + few medium distinct 10YR5/6	Silt Clay Loam
10-14	B3	10YR5/2	common fine distinct 10YR4/4	Silt Loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
__X__ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: The hydric soils criterion has been met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: Due to the absence of hydrophytic vegetation, this data point is not located within a wetland.

APPENDIX D

RAPID BIOASSESSMENT PROTOCOL SHEETS

High Gradient Stream Data Sheet

STREAM NAME: Intermittent Stream #1	LOCATION: McGruder Property - Tract 1
STATION #: RBP 1 MILE:	BASIN/WATERSHED: SALT RIVER
LAT: 37.97429° LONG: 85.68895°	COUNTY: Bullitt USGS 7.5 TOPO: SHEPHERDSVILLE
DATE: 11/13/2008 TIME: 13:45 [ ] AM [X] PM	INVESTIGATORS: BMA/BJD
TYPE SAMPLE: P-CHEM Macroinvertebrate FISH BACT.	

WEATHER:

Now	Past 24 Hours
Heavy Rain	Heavy Rain
Steady Rain	Steady Rain
Intermittent Showers	[Intermittent Showers]
[Clear/Sunny]	Clear/Sunny

Has there been a heavy rain in the last 7 days? Yes [No]

Air Temperature 65 °F ____ °C

Rainfall in the past 24 hours ____ in.

30 % Cloud Cover

P-Chem: Temp (°C) ____ D.O. (mg/l) ____ % Saturation ____ pH (S.U.) ____ Cond. ____ Grab

INSTREAM WATERSHED FEATURES:

Stream Width	4-6	ft
Range of Depth	1"-6"	ft
Average Velocity	<1	ft/s
Discharge		cfs
Est. Reach Length	200	ft

LOCAL WATERSHED FEATURES:

Predominant Surrounding Land Use:

Surface Mining	[Construction]	Forest
Deep Mining	[Commercial]	[Pasture/Grazing]
Oil Wells	[Industrial]	Silviculture
Land Disposal	Row Crops	Urban Runoff/Storm Sewers

Hydraulic Structures

Dams Bridge Abutments
Island Waterfalls
[Other] culvert at farm road

Stream Flow:

Dry Pooled Low [Normal]
High Very Rapid or Torrential

Stream Type:

Perennial [Intermittent]
Ephemeral Seep

Riparian Vegetation

Dominate Type:

[Trees] [Shrubs]
[Grasses] [Herbaceous]

Number of strata: 4

Dom. Tree/Shrub Taxa

Black Walnut
Box Elder
Hackberry
Black Willow

Canopy Cover:

[Fully Exposed (0-25%)]
Partially Exposed (25-50%)
Partially Shaded (50-75%)
Fully Shaded (75-100%)

Channel Alterations:

Dredging
Channelization
(Full [Partial]) some impacts due to filling/grading activities

Substrate Est. P.C	Riffle 20 %	Run 40 %	Pool 40 %
Silt/Clay (<0.06 mm)		X	X
Sand (0.06 - 2 mm)			
Gravel (2-64 mm)	X	X	
Cobble (64 - 256 mm)	X	X	
Boulders (>256 mm)			
Bedrock			

Habitat Parameter	Condition Category: Excellent	Good	Fair	Poor
1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover	40-70% mix of stable habitat: well-suited for full coloinization potential	20-40% mix of stable habitat; habitat availability less than desirable	Less than 20% stable habitat; lack of habitat is obvious
12	16 - 20	11 - 15	6 - 10	0 - 5
2. Embeddedness	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment
14	16 - 20	11 - 15	6 - 10	0 - 5
3. Velocity/Depth Regime	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is <0.3 m/x, deep is >0.5 m).	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/depth regime (usually slow-deep)
9	16 - 20	11 - 15	6 - 10	0 - 5

Project Name: McGruder Property - Tract 1 Stream Name: Intermittent Stream #1

4. Sediment Deposition	**10**	Little or no enlargement of islands or point bars and less than <20% of bottom affected by deposition.	Some new increase in bar formation, mostly from gravel, sand, or fine sediment; 20-50% of the bottom affected	Moderate deposition of new gravel, sand, or fine sediment on old and new bars; 50-80% of the bottom affected. Sediment deposits at obstructions, constrictions, and bends.	Heavy deposits of fine material, increased bar development; more than 80% of bottom changing frequently.
		16 - 20	11 - 15	6 - 10	0 - 5
5. Channel Flow Status	**14**	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel is exposed.	Water fills 25-50% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
		16 - 20	11 - 15	6 - 10	0 - 5
6. Channel Alteration	**15**	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, evidence of past channelization (> past 20 years) may be present.	Channelization may be extensive; shoring structures on both banks and 40-80% stream reach channelized.	Brush shored with gabion or cement; over 80% of reach channelized and disrupted.
		16 - 20	11 - 15	6 - 10	0 - 5
7. Frequency of Riffles (or bends)	**16**	Occurrence of riffles relatively frequent; ratio of ditance between riffles divided by width of the stream <7:1.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; ditance between riffles divided by the width of the stream is a ratio of >25.
		16 - 20	11 - 15	6 - 10	0 - 5
8. Bank Stability		Stable; evidence of erosion of bank failure absent or minimal. Little potential for future problem.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank has areas of erosion.	Moderately unstable; 30-60% of bank has areas of erosion; high erosion potential during floods.	Unstable; eroded areas frequent; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE (LB)	**5**	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB)	**5**	9 - 10	6 - 8	3 - 5	0 - 2
9. Vegetative Protection		More than 90% of streambank surfaces and immediate riparian zone covered by native vegetation.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants not well-represented; disruption evident.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil.	Less than 50% of the streambank surfaces covered by vegettaion disruption of streambank vegetation is very high.
SCORE (LB)	**5**	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB)	**5**	9 - 10	6 - 8	3 - 5	0 - 2
10. Riparian Vegetative Zone Width		Width of riparian zone >18 meters; human activities have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters; little or no riparian vegetation due to human activities.
SCORE (LB)	**1**	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB)	**1**	9 - 10	6 - 8	3 - 5	0 - 2

Total Score: **112** **NOTES/COMMENTS:** Poor

Bluegrass Bioregion (High Gradient Assessments) Headwater Streams (<5.0 mi^2)

Fully Supporting	(Excellent)	156-200
Supporting but Threatened and Partially Supporting	(Average)	142-155
Not Supporting	(Poor)	0-141

Reference: "Methods for Assessing Biological Integrity of Surface Waters in Kentucky." Kentucky Division of Water. February 2008, Revision 3.

High Gradient Stream Data Sheet

STREAM NAME: Intermittent Stream #2	LOCATION: McGruder Property - Tract 1
STATION #: RBP 2 MILE:	BASIN/WATERSHED: SALT RIVER
LAT: 37.97023° LONG: 85.68504°	COUNTY: Bullitt USGS 7.5 TOPO: SHEPHERDSVILLE
DATE: 11/13/2008 TIME: 11:00 [X] AM [ ] PM	INVESTIGATORS: BMA/BJD
TYPE SAMPLE: P-CHEM Macroinvertebrate FISH BACT.	

WEATHER:

Now	Past 24 Hours
Heavy Rain	Heavy Rain
Steady Rain	Steady Rain
Intermittent Showers	[Intermittent Showers]
[Clear/Sunny]	Clear/Sunny

Has there been a heavy rain in the last 7 days? Yes [No]

Air Temperature 62 °F ____ °C

Rainfall in the past 24 hours ____ in.

80 % Cloud Cover

P-Chem: Temp (°C) ____ D.O. (mg/l) ____ % Saturation ____ pH (S.U.) ____ Cond. ____ Grab

INSTREAM WATERSHED FEATURES:

Stream Width	2-4	ft
Range of Depth	0.5"-4"	ft
Average Velocity	<1	ft/s
Discharge		cfs
Est. Reach Length	150	ft

LOCAL WATERSHED FEATURES:

Predominant Surrounding Land Use:

Surface Mining	Construction	Forest
Deep Mining	[Commercial]	[Pasture/Grazing]
Oil Wells	[Industrial]	Silviculture
Land Disposal	Row Crops	Urban Runoff/Storm Sewers

Hydraulic Structures

Dams Bridge Abutments
Island Waterfalls
Other **None**

Stream Flow:

Dry Pooled Low [Normal]
High Very Rapid or Torrential

Stream Type:

Perennial [Intermittent]
Ephemeral Seep

Riparian Vegetation

Dominate Type:

[Trees] [Shrubs]
[Grasses] [Herbaceous]

Number of strata: 4

Dom. Tree/Shrub Taxa

Sycamore
Cottonwood
Sandbar Willow
Eastern Red Cedar

Canopy Cover:

[Fully Exposed (0-25%)]
Partially Exposed (25-50%)
Partially Shaded (50-75%)
Fully Shaded (75-100%)

Channel Alterations:

Dredging
[Channelization]
([Full] Partial)
Constructed Straight Channel

Substrate Est. P.C	**Riffle** 25 **%**	**Run** 50 **%**	**Pool** 25 **%**
Silt/Clay (<0.06 mm)			
Sand (0.06 - 2 mm)			X
Gravel (2-64 mm)	X	X	X
Cobble (64 - 256 mm)	X	X	X
Boulders (>256 mm)			
Bedrock	X	X	X

Habitat Parameter	Condition Category: Excellent	Good	Fair	Poor
1. Epifaunal Substrate/ Available Cover **13**	Greater than 70% of substrate favorable for epifaunal colonization and fish cover	40-70% mix of stable habitat: well-suited for full coloinization potential	20-40% mix of stable habitat; habitat availability less than desirable	Less than 20% stable habitat; lack of habitat is obvious
	16 - 20	11 - 15	6 - 10	0 - 5
2. Embeddedness **16**	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment
	16 - 20	11 - 15	6 - 10	0 - 5
3. Velocity/Depth Regime **8**	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is <0.3 m/x, deep is >0.5 m).	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/depth regime (usually slow-deep)
	16 - 20	11 - 15	6 - 10	0 - 5

Project Name: McGruder Property - Tract 1 Stream Name: Intermittent Stream #2

4. Sediment Deposition		Little or no enlargement of islands or point bars and less than <20% of bottom affected by deposition.	Some new increase in bar formation, mostly from gravel, sand, or fine sediment; 20-50% of the bottom affected	Moderate deposition of new gravel, sand, or fine sediment on old and new bars; 50-80% of the bottom affected. Sediment deposits at obstructions, constrictions, and bends.	Heavy deposits of fine material, increased bar development; more than 80% of bottom changing frequently.
	16	16 - 20	11 - 15	6 - 10	0 - 5
5. Channel Flow Status		Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel is exposed.	Water fills 25-50% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
	16	16 - 20	11 - 15	6 - 10	0 - 5
6. Channel Alteration		Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, evidence of past channelization (> past 20 years) may be present.	Channelization may be extensive; shoring structures on both banks and 40-80% stream reach channelized.	Brush shored with gabion or cement; over 80% of reach channelized and disrupted.
	3	16 - 20	11 - 15	6 - 10	0 - 5
7. Frequency of Riffles (or bends)		Occurrence of riffles relatively frequent; ratio of ditance between riffles divided by width of the stream <7:1.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; ditance between riffles divided by the width of the stream is a ratio of >25.
	14	16 - 20	11 - 15	6 - 10	0 - 5
8. Bank Stability		Stable; evidence of erosion of bank failure absent or minimal. Little potential for future problem.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank has areas of erosion.	Moderately unstable; 30-60% of bank has areas of erosion; high erosion potential during floods.	Unstable; eroded areas frequent; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE (LB)	**9**	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB)	**9**	9 - 10	6 - 8	3 - 5	0 - 2
9. Vegetative Protection		More than 90% of streambank surfaces and immediate riparian zone covered by native vegetation.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants not well-represented; disruption evident.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil.	Less than 50% of the streambank surfaces covered by vegettaion disruption of streambank vegetation is very high.
SCORE (LB)	**9**	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB)	**9**	9 - 10	6 - 8	3 - 5	0 - 2
10. Riparian Vegetative Zone Width		Width of riparian zone >18 meters; human activities have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters; little or no riparian vegetation due to human activities.
SCORE (LB)	**1**	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB)	**1**	9 - 10	6 - 8	3 - 5	0 - 2

Total Score: **124** **NOTES/COMMENTS:** Poor

Bluegrass Bioregion (High Gradient Assessments) Headwater Streams (<5.0 mi^2)

Fully Supporting	(Excellent)	156-200
Supporting but Threatened and Partially Supporting	(Average)	142-155
Not Supporting	(Poor)	0-141

Reference: "Methods for Assessing Biological Integrity of Surface Waters in Kentucky." Kentucky Division of Water. February 2008, Revision 3.

High Gradient Stream Data Sheet

STREAM NAME: Buffalo Run	LOCATION: McGruder Property - Tract 1
STATION #: RBP 3 MILE:	BASIN/WATERSHED: SALT RIVER
LAT: 37.97789° LONG: 85.69059°	COUNTY: Bullitt USGS 7.5 TOPO: SHEPHERDSVILLE
DATE: 11/13/2008 TIME: 16:00 [ ] AM [X] PM	INVESTIGATORS: BMA/BJD
TYPE SAMPLE: P-CHEM Macroinvertebrate FISH BACT.	

WEATHER:

Now	Past 24 Hours
Heavy Rain	Heavy Rain
Steady Rain	Steady Rain
Intermittent Showers	[Intermittent Showers]
[Clear/Sunny]	Clear/Sunny

Has there been a heavy rain in the last 7 days? Yes [No]

Air Temperature 68 °F ____ °C

Rainfall in the past 24 hours ____ in.

30 % Cloud Cover

P-Chem: Temp (°C) ____ D.O. (mg/l) ____ % Saturation ____ pH (S.U.) ____ Cond. ____ Grab

INSTREAM WATERSHED FEATURES:

Stream Width	12-16	ft
Range of Depth	1-2	ft
Average Velocity	<1	ft/s
Discharge		cfs
Est. Reach Length	200	ft

LOCAL WATERSHED FEATURES:

Predominant Surrounding Land Use:

Surface Mining	[Construction]	Forest
Deep Mining	[Commercial]	[Pasture/Grazing]
Oil Wells	[Industrial]	Silviculture
Land Disposal	Row Crops	Urban Runoff/Storm Sewers

Hydraulic Structures

Dams Bridge Abutments
Island Waterfalls
[Other] **KY HWY 480 road crossing**

Stream Flow:

Dry Pooled Low [Normal]
High Very Rapid or Torrential

Stream Type:

[Perennial] Intermittent
Ephemeral Seep

Riparian Vegetation

Dominate Type:

[Trees] [Shrubs]
[Grasses] [Herbaceous]

Number of strata: 4

Dom. Tree/Shrub Taxa

Box Elder
Sycamore
American Elm

Canopy Cover:

[Fully Exposed (0-25%)]
Partially Exposed (25-50%)
Partially Shaded (50-75%)
Fully Shaded (75-100%)

Channel Alterations:

Dredging
[Channelization]
([Full] Partial)
Channel historically rerouted.

Substrate Est. P.C	Riffle ____ %	Run 20 %	Pool 80 %
Silt/Clay (<0.06 mm)		X	X
Sand (0.06 - 2 mm)			
Gravel (2-64 mm)		X	X
Cobble (64 - 256 mm)		X	X
Boulders (>256 mm)		X	X
Bedrock			

Habitat Parameter	Condition Category: Excellent	Good	Fair	Poor
1. Epifaunal Substrate/ Available Cover **6**	Greater than 70% of substrate favorable for epifaunal colonization and fish cover	40-70% mix of stable habitat: well-suited for full coloinization potential	20-40% mix of stable habitat; habitat availability less than desirable	Less than 20% stable habitat; lack of habitat is obvious
	16 - 20	11 - 15	6 - 10	0 - 5
2. Embeddedness **8**	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment
	16 - 20	11 - 15	6 - 10	0 - 5
3. Velocity/Depth Regime **14**	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is <0.3 m/x, deep is >0.5 m).	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/depth regime (usually slow-deep)
	16 - 20	11 - 15	6 - 10	0 - 5

Project Name: McGruder Property - Tract 1 Stream Name: Buffalo Run

4. Sediment Deposition	Little or no enlargement of islands or point bars and less than <20% of bottom affected by deposition.	Some new increase in bar formation, mostly from gravel, sand, or fine sediment; 20-50% of the bottom affected	Moderate deposition of new gravel, sand, or fine sediment on old and new bars; 50-80% of the bottom affected. Sediment deposits at obstructions, constrictions, and bends.	Heavy deposits of fine material, increased bar development; more than 80% of bottom changing frequently.
10	16 - 20	11 - 15	6 - 10	0 - 5
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel is exposed.	Water fills 25-50% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
14	16 - 20	11 - 15	6 - 10	0 - 5
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, evidence of past channelization (> past 20 years) may be present.	Channelization may be extensive; shoring structures on both banks and 40-80% stream reach channelized.	Brush shored with gabion or cement; over 80% of reach channelized and disrupted.
10	16 - 20	11 - 15	6 - 10	0 - 5
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of ditance between riffles divided by width of the stream <7:1.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; ditance between riffles divided by the width of the stream is a ratio of >25.
10	16 - 20	11 - 15	6 - 10	0 - 5
8. Bank Stability	Stable; evidence of erosion of bank failure absent or minimal. Little potential for future problem.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank has areas of erosion.	Moderately unstable; 30-60% of bank has areas of erosion; high erosion potential during floods.	Unstable; eroded areas frequent; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE (LB) 6	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB) 8	9 - 10	6 - 8	3 - 5	0 - 2
9. Vegetative Protection	More than 90% of streambank surfaces and immediate riparian zone covered by native vegetation.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants not well-represented; disruption evident.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil.	Less than 50% of the streambank surfaces covered by vegettaion disruption of streambank vegetation is very high.
SCORE (LB) 6	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB) 6	9 - 10	6 - 8	3 - 5	0 - 2
10. Riparian Vegetative Zone Width	Width of riparian zone >18 meters; human activities have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters; little or no riparian vegetation due to human activities.
SCORE (LB) 2	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB) 2	9 - 10	6 - 8	3 - 5	0 - 2

Total Score: **102** **NOTES/COMMENTS:** Poor

Bluegrass Bioregion (High Gradient Assessments) Headwater Streams (<5.0 mi^2)

Fully Supporting	(Excellent)	156-200
Supporting but Threatened and Partially Supporting	(Average)	142-155
Not Supporting	(Poor)	0-141

Reference: "Methods for Assessing Biological Integrity of Surface Waters in Kentucky." Kentucky Division of Water. February 2008, Revision 3.

High Gradient Stream Data Sheet

STREAM NAME: Intermittent Stream #1	LOCATION: McGruder Property - Tract 1 - Off-Site Location
STATION #: RBP 4 MILE:	BASIN/WATERSHED: SALT RIVER
LAT: 37.97306° LONG: 85.68920°	COUNTY: Bullitt USGS 7.5 TOPO: SHEPHERDSVILLE
DATE: 01/08/2009 TIME: 11:50 [X] AM [ ] PM	INVESTIGATORS: BMA/BJD
TYPE SAMPLE: P-CHEM Macroinvertebrate FISH BACT.	

WEATHER:

Now	Past 24 Hours
Heavy Rain	Heavy Rain
Steady Rain	Steady Rain
Intermittent Showers	[Intermittent Showers]
[Clear/Sunny]	Clear/Sunny

Has there been a heavy rain in the last 7 days? [Yes] No

Air Temperature 28 °F ____ °C

Rainfall in the past 24 hours <0.5 in.

10 % Cloud Cover

P-Chem: Temp (°C) ____ D.O. (mg/l) ____ % Saturation ____ pH (S.U.) ____ Cond. ____ Grab

INSTREAM WATERSHED FEATURES:

Stream Width	6-8	ft
Range of Depth	4"-8"	ft
Average Velocity	å1	ft/s
Discharge		cfs
Est. Reach Length	200	ft

LOCAL WATERSHED FEATURES:

Predominant Surrounding Land Use:

Surface Mining	[Construction]	Forest
Deep Mining	[Commercial]	[Pasture/Grazing]
Oil Wells	[Industrial]	Silviculture
Land Disposal	Row Crops	Urban Runoff/Storm Sewers

Hydraulic Structures

Dams Bridge Abutments
Island Waterfalls
Other **None**

Stream Flow:

Dry Pooled Low Normal
[High] Very Rapid or Torrential

Stream Type:

Perennial [Intermittent]
Ephemeral Seep

Riparian Vegetation

Dominate Type:

[Trees] [Shrubs]
[Grasses] [Herbaceous]

Number of strata: 4

Dom. Tree/Shrub Taxa

Box Elder
Black Walnut
Green Ash
Black Cherry

Canopy Cover:

[Fully Exposed (0-25%)]
Partially Exposed (25-50%)
Partially Shaded (50-75%)
Fully Shaded (75-100%)

Channel Alterations:

Dredging
Channelization
(Full Partial)
None

Substrate Est. P.C	**Riffle** 10 **%**	**Run** 70 **%**	**Pool** 20 **%**
Silt/Clay (<0.06 mm)	X	X	X
Sand (0.06 - 2 mm)	X	X	X
Gravel (2-64 mm)	X	X	X
Cobble (64 - 256 mm)			
Boulders (>256 mm)			
Bedrock			

Habitat Parameter	Condition Category			
	Excellent	**Good**	**Fair**	**Poor**
1. Epifaunal Substrate/ Available Cover **4**	Greater than 70% of substrate favorable for epifaunal colonization and fish cover	40-70% mix of stable habitat: well-suited for full coloinization potential	20-40% mix of stable habitat; habitat availability less than desirable	Less than 20% stable habitat; lack of habitat is obvious
	16 - 20	11 - 15	6 - 10	0 - 5
2. Embeddedness **4**	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment
	16 - 20	11 - 15	6 - 10	0 - 5
3. Velocity/Depth Regime **10**	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is <0.3 m/x, deep is >0.5 m).	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/depth regime (usually slow-deep)
	16 - 20	11 - 15	6 - 10	0 - 5

Project Name: McGruder Property - Tract 1 - Off-Site Location Stream Name: Intermittent Stream #1

4. Sediment Deposition	Little or no enlargement of islands or point bars and less than <20% of bottom affected by deposition.	Some new increase in bar formation, mostly from gravel, sand, or fine sediment; 20-50% of the bottom affected	Moderate deposition of new gravel, sand, or fine sediment on old and new bars; 50-80% of the bottom affected. Sediment deposits at obstructions, constrictions, and bends.	Heavy deposits of fine material, increased bar development; more than 80% of bottom changing frequently.
13	16 - 20	11 - 15	6 - 10	0 - 5
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel is exposed.	Water fills 25-50% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
20	16 - 20	11 - 15	6 - 10	0 - 5
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, evidence of past channelization (> past 20 years) may be present.	Channelization may be extensive; shoring structures on both banks and 40-80% stream reach channelized.	Brush shored with gabion or cement; over 80% of reach channelized and disrupted.
20	16 - 20	11 - 15	6 - 10	0 - 5
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of ditance between riffles divided by width of the stream <7:1.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; ditance between riffles divided by the width of the stream is a ratio of >25.
8	16 - 20	11 - 15	6 - 10	0 - 5
8. Bank Stability	Stable; evidence of erosion of bank failure absent or minimal. Little potential for future problem.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank has areas of erosion.	Moderately unstable; 30-60% of bank has areas of erosion; high erosion potential during floods.	Unstable; eroded areas frequent; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE (LB) 9	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB) 9	9 - 10	6 - 8	3 - 5	0 - 2
9. Vegetative Protection	More than 90% of streambank surfaces and immediate riparian zone covered by native vegetation.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants not well-represented; disruption evident.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil.	Less than 50% of the streambank surfaces covered by vegettaion disruption of streambank vegetation is very high.
SCORE (LB) 9	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB) 9	9 - 10	6 - 8	3 - 5	0 - 2
10. Riparian Vegetative Zone Width	Width of riparian zone >18 meters; human activities have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters; little or no riparian vegetation due to human activities.
SCORE (LB) 7	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB) 9	9 - 10	6 - 8	3 - 5	0 - 2

Total Score: **131** **NOTES/COMMENTS:** Poor

Bluegrass Bioregion (High Gradient Assessments) Headwater Streams (<5.0 mi^2)

Fully Supporting	(Excellent)	156-200
Supporting but Threatened and Partially Supporting	(Average)	142-155
Not Supporting	(Poor)	0-141

Reference: "Methods for Assessing Biological Integrity of Surface Waters in Kentucky." Kentucky Division of Water. February 2008, Revision 3.

APPENDIX E

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION FORM ---- McGruder Property – Tract 1

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): 01/22/09

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

Mr. Gary McGruder
Rolling Acres Farm, LLC
960 S. Preston Highway
Shepherdsville, KY 40165

Represented By: Redwing Ecological Services, Inc.
1139 South Fourth Street
Louisville, KY 40203

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: Louisville District; McGruder Property – Tract 1; LRL-2009-029-jct

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: The project site is located east of Interstate 65 in the southeast quadrant of the intersection of Kentucky Highway 480 and Buffalo Run Boulevard in Bullitt County, Kentucky.

(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: KY County/parish/borough: Bullitt City: Cedar Grove
Center coordinates of site (lat/long in degree decimal format): Lat. N37.9743°, Long. W85.6890°

Universal Transverse Mercator:

Name of nearest waterbody: Buffalo Run

Identify (estimate) amount of waters in the review area: Buffalo Run (perennial stream); Intermittent Streams 1 and 2; Ephemeral Streams 1 and 2; Wetlands 1-5
Non-wetland waters: 1,490 linear feet: 2 to 16 width (ft) and/or 0.31 acre of stream.
Cowardin Class: Buffalo Run (perennial stream) – R3UB1H; Intermittent Streams 1 and 2 – R4SB3J; Ephemeral Streams 1 and 2 – Not Applicable
Stream Flow: Non-RPW and RPW
Wetlands: 1.38 acres.
Cowardin Class: Wetlands 1 through 5 – PEM1Y

Name of any water bodies on the site that have been identified as Section 10 waters: None
Tidal: None
Non-Tidal: None

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: January 22, 2009 office meeting with USACE

☒ Field Determination. Date(s): November 5, 2008 site visit by USACE

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.
This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Water/Wetland Location Map and Proposed Development Map.

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
- ☐ Office concurs with data sheets/delineation report.
- ☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps: .

☐ Corps navigable waters' study: .

☐ U.S. Geological Survey Hydrologic Atlas: .
- ☐ USGS NHD data.
- ☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: Shepherdsville, KY, 7.5-minute quadrangle.

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: USDA Soil Survey of Bullitt and Spencer Counties, Kentucky 1986.

☐ National wetlands inventory map(s). Cite name: .

☐ State/Local wetland inventory map(s): .

☒ FEMA/FIRM maps: FEMA Q3 Flood Data for Bullitt County.

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): kygeonet.gov 2006.
or ☒ Other (Name & Date): November 13, 2008.

☐ Previous determination(s). File no. and date of response letter: .

☐ Other information (please specify): .

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of Regulatory Project Manager (REQUIRED)	Signature and date of person requesting preliminary JD (REQUIRED, unless obtaining the signature is impracticable)

Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
Buffalo Run (perennial stream)	N37.9779°	W85.6906°	R3UB1H	765 linear feet, 0.25 acre	Non-section 10; RPW
Intermittent Stream 1	N37.9743°	W85.6890°	R4SB3J	360 linear feet, 0.041 acre	Non-section 10; RPW
Intermittent Stream 2	N37.9702°	W85.6850°	R4SB3J	260 linear feet, 0.018 acre	Non-section 10; RPW
Ephemeral Stream 1	N37.9744°	W85.6881°	----	40 linear feet, 0.002 acre	Non-section 10; non-RPW
Ephemeral Stream 2	N37.9743°	W85.6891°	----	65 linear feet, 0.002 acre	Non-section 10; non-RPW
Wetland 1	N37.9704°	W85.6887°	PEM1Y	0.10 acre	Non-section 10; wetland
Wetland 2	N37.9715°	W85.6854°	PEM1Y	0.08 acre	Non-section 10; wetland
Wetland 3	N37.9713°	W85.6898°	PEM1Y	0.07 acre	Non-section 10; wetland
Wetland 4	N37.9747°	W85.6895°	PEM1Y	0.85 acre	Non-section 10; wetland
Wetland 5	N37.9712°	W85.6854°	PEM1Y	0.28 acre	Non-section 10; wetland

APPENDIX F

PERMIT DOCUMENTATION FOR REROUTING OF BUFFALO RUN

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
P.O. BOX 59
LOUISVILLE, KENTUCKY 40201-0059

October 8, 1996

Operations Division
Regulatory Branch (South)
ID No. 199601460-mkm

Mr. Raymond McGruder
896 Bates Lane
Shepherdsville, Kentucky 40165

Dear Mr. McGruder:

This is in response to your request for authorization to relocate 300 feet of the existing channel of Buffalo Run near Shepherdsville, in Bullitt County, Kentucky. The information supplied by you was reviewed to determine whether a Department of the Army (DA) permit will be required under the provisions of Section 404 of the Clean Water Act.

Your project is considered a discharge of dredged or fill material into a headwaters or isolated waters. Since less than 1 acre of "waters of the United States" (wetlands) would be impacted by this discharge and the work site is above the headwaters of Salt River, the project is authorized under the provisions of 33 CFR 330 Appendix A, Part B Nationwide Permit (NWP) No. 26, Headwaters and Isolated Waters. Under the provisions of this authorization, you must comply with the enclosed Terms for Nationwide Permit No. 26 and the Nationwide Permit Conditions. You must also comply with the 10 conditions listed on your Water Quality Certification (WQC) from the Kentucky Division of Water.

Since you have already obtained your WQC, you may proceed with the project without further contact or verification from us. This decision is valid for 2 years from the date of this letter. If your project is not completed within this 2-year period or if your project is modified, you must contact us for another permit determination. A copy of this letter will be sent to the Division of Water (see enclosure for address).

If you have any questions, please contact Mr. Mike Meyer by writing to the above address, ATTN: CEORL-OP-FS, or by calling (502) 582-5452. Any correspondence on this matter should refer to our ID No. 199601460-mkm.

Sincerely,

Ronny T. Sachi

for Daniel L. Evans
Chief, South Section
Regulatory Branch

Enclosures

COMMONWEALTH OF KENTUCKY

DIVISION OF WATER
WATER QUALITY BRANCH
14 Reilly Rd.
Frankfort, KY 40601

502/564-3410

DEP5029

FINAL CONSTRUCTION REPORT

COE PUBLIC NOTICE #: _____

DATE: 11-1-96

APPLICANT NAME: RAYMOND McGRUDER	AGENT NAME:
CORPORATE NAME:	
ADDRESS: 896 BATES LANE	ADDRESS:
CITY: SHEP | STATE: KY | ZIP CODE: 40165	CITY | STATE | ZIP CODE
TELEPHONE NUMBER: 502 957 3844 502 955 7011	TELEPHONE NUMBER:
COUNTY: BULLITT	LOCATION DESCRIPTION:
Linear feet of stream impacted: 3001	Linear feet of stream mitigated:
Acres of wetlands impacted: NONE	Acres of wetlands mitigated:

Has all work on this project been completed according to plans and specifications of the water quality certification on file with the Division of Water? ☒ Yes ☐ No

If not, explain:

SIGNATURE: Raymond McGruder

JAMES E. BICKFORD
SECRETARY

PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

September 18, 1996

Raymond G. McGruder
896 Bates Lane
Shepherdsville, KY 40165

RE: Section 401 Water Quality Certification: Raymond McGruder, Stream Relocation, Buffalo Run, Bullitt County

Dear Mr. McGruder:

Pursuant to Section 401 of the Clean Water Act (CWA), the Commonwealth of Kentucky certifies it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 5, established pursuant to Sections 301, 302, 304, 306, and 307 of the CWA, will not be violated by the above referenced project provided that the U.S. Army Corps of Engineers authorizes the activity under 33 CFR Part 330 Appendix A(B)(26); that the disposal site(s) has been approved according to U.S. Environmental Protection Agency regulations as established pursuant to Section 404(b)(1) of the CWA; and the following conditions are met:

1. All work performed under this certification shall adhere to the design and specifications set forth in the subject Section 401 application dated August 30, 1996.

2. All earthwork operations shall be carried out so that soil erosion and sediment runoff to waters of the Commonwealth are controlled and minimized. Best management practices for water pollution control shall be used.

3. Heavy equipment, such as bulldozers, backhoes, and draglines, shall not be used or operated within waters of the Commonwealth, unless that use cannot be avoided. If use of heavy equipment is unavoidable, then the work shall be performed so as to minimize resuspension of sediments and disturbance to substrates, banks, or riparian vegetation.

4. Measures shall be taken to prevent and to control spills of fuels, lubricants, and other materials from entering waters of the Commonwealth.

5. Should evidence of stream use or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the Kentucky Division of Water, Water Quality Branch and Louisville Regional Office shall be notified immediately. In such case(s), additional investigations or alternate engineering practices may be required.

6. Any fill or riprap shall be of a composition that shall not cause violations of water quality standards by adversely affecting the biological, chemical, or physical properties of waters of the Commonwealth. If riprap is used, it shall be of a weight and size that bank stress or slump conditions shall not occur.

7. Removal of riparian vegetation shall be minimized.

8. The Division of Water reserves the right to modify or revoke this certification should it be determined that the activity is in noncompliance with any condition set forth in this certification.

9. If construction does not commence within one year of the date of this letter, this certification will become void. A letter requesting a renewal should be submitted.

10. Upon completion, a professional engineer shall certify that construction met or exceeded specifications applicable under this certification, and shall submit such certification(s) to the Water Quality Branch of the Division of Water (see attached Final Construction Report Form).

Sincerely,

Robert W. Logan

for Jack A. Wilson, Director
Division of Water

JAW:BS

Attachment

cc: Dan Evans, COE: Louisville
Becky Fox, EPA: Atlanta
Mike Mudd, DOW: Louisville Regional Office

Section 404 Only Conditions

In addition to the General Conditions, the following conditions apply only to activities that involve the discharge of dredged or fill material and must be followed in order for authorization by the nationwide permits to be valid:

1. *Water supply intakes.* No discharge of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structures or adjacent bank stabilization.

2. *Shellfish production.* No discharge of dredged or fill material may occur in areas of concentrated shellfish production, unless the discharge is directly related to a shellfish harvesting activity authorized by nationwide permit 4.

3. *Suitable material.* No discharge of dredged or fill material may consist of unsuitable material (e.g., trash, debris, car bodies, etc.) and material discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

4. *Mitigation.* Discharges of dredged or fill material into waters of the United States must be minimized or avoided to the maximum extent practicable at the project site (i.e. on-site), unless the DE has approved a compensation mitigation plan for the specific regulated activity.

5. *Spawning areas.* Discharges in spawning areas during spawning seasons must be avoided to the maximum extent practicable.

6. *Obstruction of high flows.* To the maximum extent practicable, discharges must not permanently restrict or impede the passage of normal or expected high flows or cause the relocation of the water (unless the primary purpose of the fill is to impound waters).

7. *Adverse impacts from impoundments.* If the discharge creates an impoundment of water, adverse impacts on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow shall be minimized to the maximum extent practicable.

8. *Waterfowl breeding areas.* Discharges into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

9. *Removal of temporary fills.* Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

Nationwide Permit Conditions

General Conditions: The following general conditions must be followed in order for any authorization by a nationwide permit to be valid:

1. *Navigation.* No activity may cause more than a minimal adverse effect on navigation.

2. *Proper maintenance.* Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.

3. *Erosion and siltation controls.* Appropriate erosion and siltation controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills must be permanently stabilized at the earliest practicable date.

4. *Aquatic life movements.* No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including those species which normally migrate through the area, unless the activity's primary purpose is to impound water.

5. *Equipment.* Heavy equipment working in wetlands must be placed on mats or other measures must be taken to minimize soil disturbance.

6. *Regional and case-by-case conditions.* The activity must comply with any regional conditions which may have been added by the division engineer (see 33 CFR 330.4(e)) and any case specific conditions added by the Corps.

7. *Wild and Scenic Rivers.* No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status. Information on Wild and Scenic Rivers may be obtained from the National Park Service and the U.S. Forest Service.

8. *Tribal rights.* No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

9. *Water quality certification.* In certain states, an individual state water quality certification must be obtained or waived (see 33 CFR 330.4(c)).

10. *Endangered Species.* No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which is likely to destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the district engineer if any listed species or critical habitat might be affected or is in the vicinity of the project and shall not begin work on the activity until notified by the district engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized. Information on the location of threatened and endangered species and their critical habitat can be obtained from the U.S. Fish and Wildlife Service and National Marine Fisheries Service. (see 33 CFR 330.4(f))

11. *Historic properties.* No activity which may affect Historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the DE has complied with the provisions of 33 CFR 325, Appendix C. The prospective permittee must notify the district engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)).

TERMS FOR NATIONWIDE PERMIT NO. 26

Headwaters and Isolated Waters Discharges. Discharges of dredged or fill material into headwaters and isolated waters provided:

a. The discharge does not cause the loss of more than 10 acres of waters of the United States;

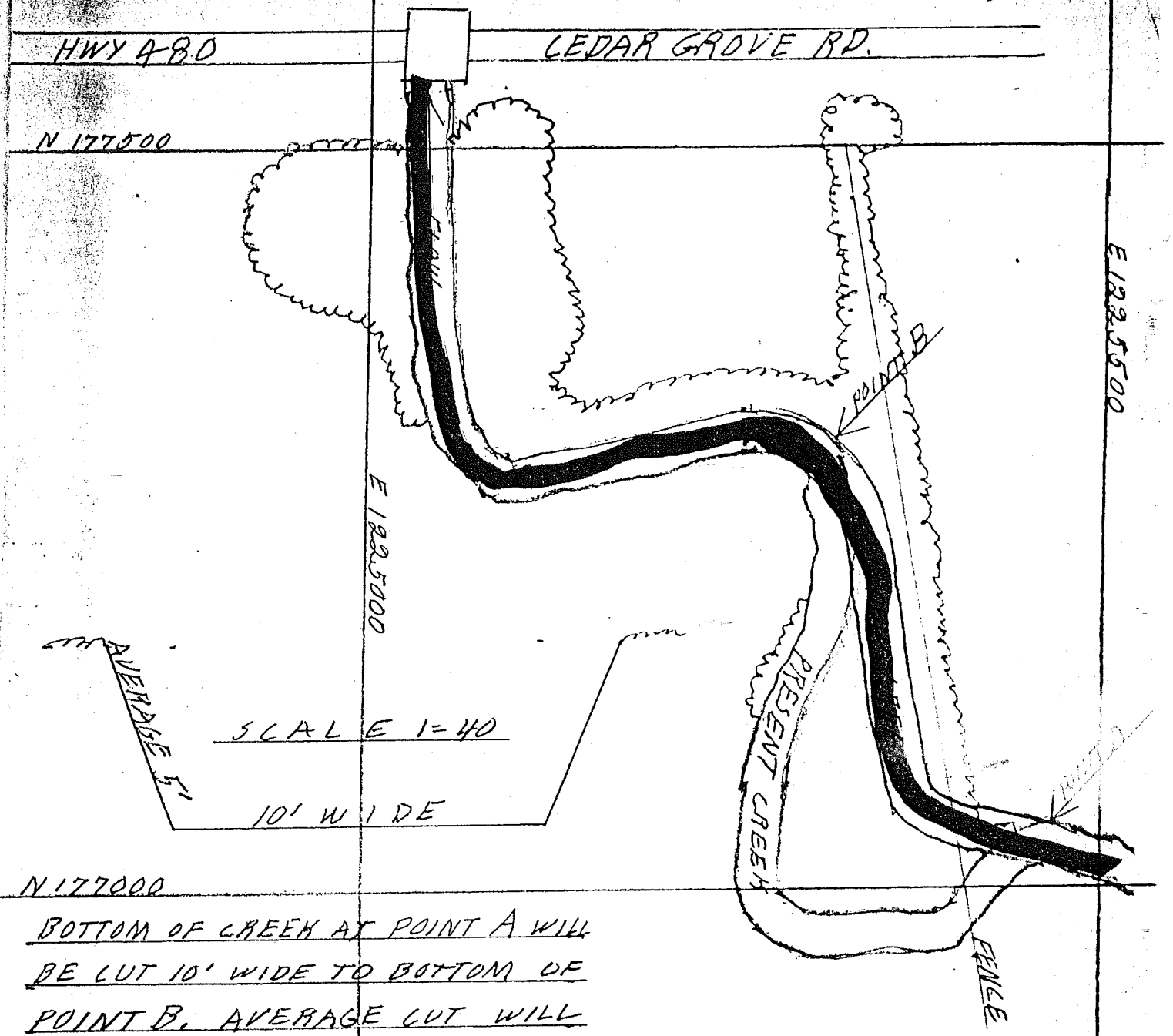
b. The permittee notifies the district engineer if the discharge would cause the loss of waters of the United States greater than one acre in accordance with the "Notification" general condition. For discharges in special aquatic sites, including wetlands, the notification must also include a delineation of affected special aquatic sites, including wetlands. (Also see 33 CFR 330.1(e)); and

c. The discharge, including all attendant features, both temporary and permanent, is part of a single and complete project.

For the purposes of this nationwide permit, the acreage of loss of waters of the United States includes the filled area plus waters of the United States that are adversely affected by flooding, excavation or drainage as a result of the project. The ten-acre and one-acre limits of NWP 26 are absolute, and cannot be increased by any mitigation plan offered by the applicant or required by the DE. Subdivisions: For any real estate subdivision created or subdivided after October 5, 1984, a notification pursuant to subsection (b) of this nationwide permit is required for any discharge which would cause the aggregate total loss of waters of the United States for the entire subdivision to exceed one (1) acre. Any discharge in any real estate subdivision which would cause the aggregate total loss of waters of the United States in the subdivision to exceed ten (10) acres is not authorized by this nationwide permit; unless the DE exempts a particular subdivision or parcel by making a written determination that: (1) the individual and cumulative adverse environmental effects would be minimal and the property owner had, after October 5, 1984, but prior to January 21, 1992, committed substantial resources in reliance on NWP 26 with regard to a subdivision, in circumstances where it would be inequitable to frustrate his investment-backed expectations, or (2) that the individual and cumulative adverse environmental effects would be minimal, high quality wetlands would not be adversely affected, and there would be an overall benefit to the aquatic environment. Once the exemption is established for a subdivision, subsequent lot development by individual property owners may proceed using NWP 26. For purposes of NWP 26, the term "real estate subdivision" shall be interpreted to include circumstances where a landowner or developer divides a tract of land into smaller parcels for the purpose of selling, conveying, transferring, leasing, or developing said parcels. This would include the entire area of a residential, commercial or other real estate subdivision, including all parcels and parts thereof. (Section 404)

ADDRESS FOR COORDINATING AGENCY

Mr. Jack A. Wilson
Director
Division of Water
Natural Resources and Environmental
Protection Cabinet
18 Reilly Road, Ash Building
Frankfort, Kentucky 40601



N 177000

BOTTOM OF CREEK AT POINT A WILL BE CUT 10' WIDE TO BOTTOM OF POINT B. AVERAGE CUT WILL BE ABOUT 5' DEEP. TOP OF CUT WILL BE ABOUT 14' WIDE. FILL FROM NEW CUT WILL BE PUT IN OLD CREEK BED. OLD CREEK BED WILL BE FILLED TO GROUND LEVEL BY ON SITE FARM FILL.

LOCATION ON SHEPHERDSVILLE QUADRANGLE
7.5 MINUTE SERIES
COPY ENCLOSED.
SCALE 1" = 100'
BY RAYMOND MCSAUDER OWNER
DATE 8-22-96

Raymond McSauder
SIGNATURE

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT
(33 CFR 325)

OMB APPROVAL NO. 0710-003
Expires October 1996

PRIVACY ACT STATEMENT

Authority: 33 USC 401, Section 10; 1413, Section 404. Principal Purpose: These laws require permits authorizing activities in, or affecting, navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Routine Uses: Information provided on this form will be used in evaluating the application for a permit. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME
RAYMOND G MCGRUDER

8. AUTHORIZED AGENT'S NAME AND TITLE *(an agent is not required)*
NA

6. APPLICANT'S ADDRESS
896 BATES LN.
SHEP, KY 40165

9. AGENT'S ADDRESS
NA

7. APPLICANT'S PHONE NOS. W/AREA CODE
a. Residence 502 9573844
b. Business 502 955 9011

10. AGENT'S PHONE NOS. W/AREA CODE
a. Residence
b. Business NA

11. STATEMENT OF AUTHORIZATION

I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

NA
APPLICANT'S SIGNATURE DATE

NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE *(see instructions)*
BUFFALO RUN CREEK

13. NAME OF WATERBODY, IF KNOWN *(if applicable)*
BUFFALO RUN CREEK

14. PROJECT STREET ADDRESS *(if applicable)*
100 BUFFALO RUN ROAD

15. LOCATION OF PROJECT
BULLITT COUNTY KY STATE

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN, *(see instructions)*

17. DIRECTIONS TO THE SITE I-65 SOUTH OF LOU TO EXIT 116, LEFT TO BUFFALO RUN ROAD, RIGHT TO FENCE ON LEFT, LEFT ALONG FENCE ABOUT 700' TO CREEK

18. Nature of Activity *(Description of project, include all features)*

TO REMOVE HORSESHOE SHAPE IN CREEK. COPY ENCLOSED.

19. Project Purpose *(Describe the reason or purpose of the project, see instructions)*

TO STRAIGHTEN CREEK SO FIELD IS USABLE.

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

NOT IN WETLANDS.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards

600 YARDS OF DIRT, NO ROCK.

22. Surface Area in Acres of Wetlands or Other Waters Filled *(see instructions)*

THE EARTH REMOVED TO STRAIGHTEN CREEK WILL BE USED IN PRESENT CREEK BED.

23. Is Any Portion of the Work Already Complete? Yes ____ No X IF YES, DESCRIBE THE COMPLETED WORK

24. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).

J. E. HACKETT 1555 CEDAR GROVE ROAD, SHEPHERDSVILLE, KY 40165

BDHM, 960 SOUTH PRESTON HIGHWAY, SHEPHERDSVILLE, KY 40165

ROBERT BUSH, 111 WILLOW WOOD DRIVE, MT. WAHSINGTON, KY 40047

25. List of Other Certifications or Approvals/Denials Received from other Federal, State or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
DIVISON OF WATER	COPY ENCLOSED		08-30-96	09-18-96	

*Would include but is not restricted to zoning, building and flood plain permits

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

Raymond G. McGruder — 09-28-96

SIGNATURE OF APPLICANT — DATE — SIGNATURE OF AGENT — DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

*U.S.GPO:1994-520-478/82018

APPENDIX G

PERMIT DOCUMENTATION FOR
STRAIGHTENING INTERMITTENT STREAM 1

Law file 5954218

PHILLIP J. SHEPHERD
SECRETARY

BRERETON C. JONES
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601

November 2, 1994

Raymon & Maxine McGruder
896 Bates Lane
Shepherdsville, Kentucky 40165

Re: Reroute of existing farm road on Buffalo Creek in Bullitt County.

Dear Mr. & Mrs. McGruder:

The Division of Water has reviewed the plans and application submitted for the above-referenced project and has approved those plans and application with respect to KRS 151.250.

The enclosed permit is issued from the standpoint of stream obstruction only and does not constitute certification of any other aspect of this project by the Commonwealth.

The permittee must notify this department in writing upon completion of this project.

Sincerely,

A. Leon Smothers

A. Leon Smothers, Manager
Water Resources Branch

ALS/JDB/dms

Enclosure

pc: Louisville Regional Office

Law office 5954218

PHILLIP J. SHEPHERD
SECRETARY

BRERETON C. JONES
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
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Sincerely,

A. Leon Smothers

A. Leon Smothers, Manager
Water Resources Branch

ALS/JDB/dms

Enclosure

pc: Louisville Regional Office

Rolling Acres Farm
896 Bates Lane
Shepherdsville, Ky. 40165

502 - 957-3844

R. G. McGruder

10-94

John Bottoms
Kentucky Division of Water
Water Rescorces Branch
14 Rieley Road
Frankfort, Ky 40601

Mr Bottoms,

Hope this is the material that you requested.

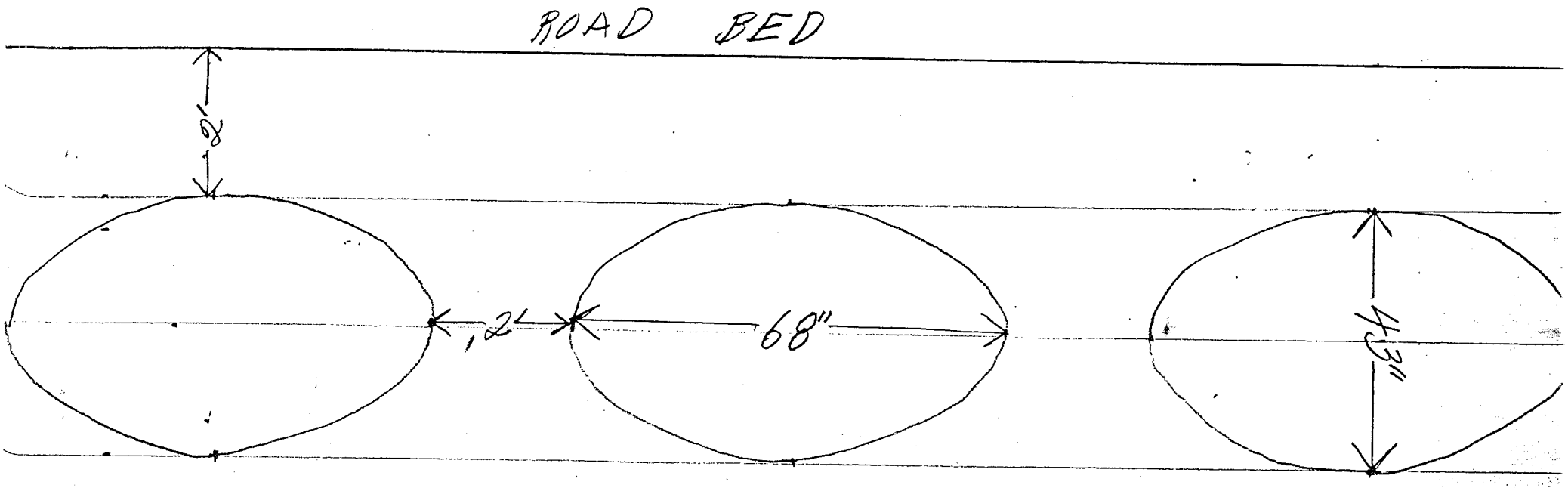
Sincerely,

R. G. McGruder

WAIVER OF PUBLIC CONSTRUCTION NOTICE

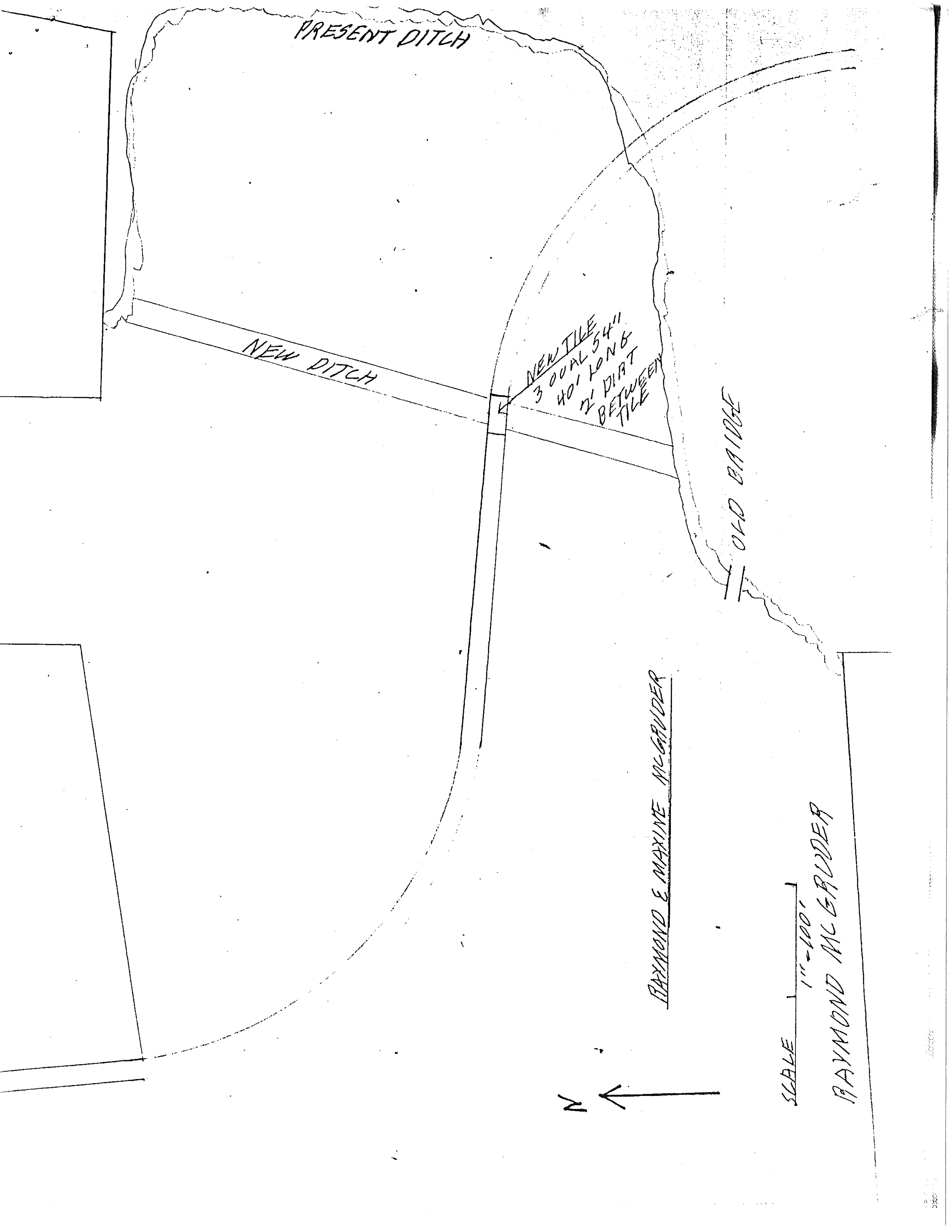
We request a WAIVER FOR PUBLIC CONSTRUCTION because of the effect of flooding caused by construction would be contained on our farm.

Raymond G. McGruder



1"=2'

RAYMOND MCGRUDER


PRESENT DITCH
NEW DITCH
NEW TILE
3 OVAL 54"
40' LONG
2' DIRT
BETWEEN
TILE
OLD BRIDGE
RAYMOND & MAXINE McGRUDER
SCALE 1" - 100'
RAYMOND McGRUDER
N

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
FRANKFORT, KENTUCKY 40601

Natural Resources and Environmental Protection Cabinet

Permit No. 5940
Expires if work is not begun by October 31, 1995

STREAM CONSTRUCTION PERMIT
For Construction In Or Along A Stream

Issued to: Raymon and Maxine McGruder

Address: 896 Bates Lane
(Street)
Shepherdsville Kentucky 40165
(City) (State) (Zip Code)

In accordance with KRS 151.250 and KRS 151.260, the Natural Resources and Environmental Protection Cabinet approves the application dated September 16, 1994 **, for** placement of 3 - 68" X 43" oval pipes and associated road surface in Buffalo Creek at approximate stream mile 1.6 in Bullitt County.

There shall be no deviation from the plans and specifications submitted and hereby approved unless the proposed change shall first have been submitted to and approved in writing by the Cabinet. This approval is subject to the following limitations.

(1) Upon completion of construction of this project, the permittee must notify this Cabinet in writing that the project has been completed.

2. This permit is issued from the standpoint of stream obstruction only and does not constitute certification of any other aspect of the proposed construction. The applicant is liable for any damage resulting from the construction, operation, or maintenance of this project. This permit has been issued under the provisions of KRS Chapter 151.250 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal and local agencies.
3. A copy of this permit must be posted at the construction site.

"SEE ADDITIONAL"
LIMITATIONS ON
REVERSE SIDE

This permit is nontransferable and is not valid unless actual construction of this authorized work is begun prior to the expiration date noted above. Any violation of the Water Resources Act of 1966 as amended is subject to penalties as set forth in KRS 151.990.

Issued this 31st **day of** October **, 19** 94 **.**

pc: Daryl Lee
Engineer: Louisville Regional Office

By R. Leon Smothers
Division of Water

DEP7026

APPENDIX H

PERMITS FOR RELOCATION OF ROLLING ACRES FARM CEMETERY

Maraman Billings Funeral Home
605 South Preston Highway
Shepherdsville, KY 40165
502/955-9771

2M Tractor and Lawn Equipment
960 South Preston Highway
Shepherdsville, KY 40165

Dear Gary,

Below please find enclosed a list of the statement for the necessary services, cemetery lots and monument requests.

Permits, Forms and Fax Services	$ 200.
Onsite Services of Funeral at Cemetery for removal	$ 500.
Cedar Grove Cemetery 2 Graves @ 600	$1200.
Foundations and replacing Monuments at Maraman Family Cemetery	$ 200.
Concrete Cremation Urns	$ 728.
Total	$2828

Thank you for allowing us to service.

Sincerely,

Dave Billings

September 25, 2008

Rolling Acres Farm, LLC.
Mr. Gary McGruder
Shepherdsville, KY 40165

RE: Relocation of graves from Rolling Acres Farm Cemetery

This is to verify that our firm obtained permits based on the Bullitt Fiscal Court order to relocate the graves of

1. William Simmons – grave location moved to Cedar Grove Cemetery
2. Elizabeth Simmons – grave location moved to Cedar Grove Cemetery
3. David Henderson – grave location moved to Maraman Family Cemetery
4. Sarah Henderson – grave location moved to Maraman Family Cemetery
5. Amanda Lutz Henderson – grave location moved to Cedar Grove Cemetery
6. Mary L. Henderson Smithers – grave location moved to Cedar Grove Cemetery

The grave contents of the above named individuals were removed, placed into a permanent concrete container and re interred in the corresponding cemeteries named above on September 19th 2008.

Sincerely,

David E. Billings
Funeral Director & Embalmer
Kentucky License Number 4484
Maraman Billings Funeral Home Ky Lic #5037

BULLITT FISCAL COURT
BULLITT COUNTY, KENTUCKY

IN RE: ROLLING ACRES FARM LLC
REMOVAL AND RELOCATION OF
ABANDONED GRAVES

PETITION TO REMOVE AND RELOCATE
ABANDONED GRAVES

Pursuant to KRS Chapter 381.755, application is hereby made by Rolling Acres Farm LLC to the Fiscal Court of Bullitt County, Kentucky:

1. Rolling Acres Farm LLC is the owner of property located on Cedar Grove Road in Bullitt County, Kentucky.
2. Located on said property are graves that have been left unattended for more than ten years.
3. Attached hereto is proof of publication of legal notices of the intention to remove and relocate these graves. No one has given notice of opposition to the move.
4. Rolling Acres Farm LLC proposes to relocate these grave to another site on the same property at its own expense.

WHEREFORE, the Petitioner, Rolling Acres Farm LLC, moves the Bullitt Fiscal Court for a resolution authorizing the removal and relocation of the aforementioned graves.

This the 9th day of August, 2007.

will not affect rates or cause anyone to be excluded. It is meant to help participants learn more about their own health and potential risks.

Mr. Smith stated that the County typically offers three plans including a core plan, a buy-up plan and a high deductible health savings plan (HDHP) and employees choose which plan they prefer. Fiscal Court pays 99% of the premium on the individual core plan. Employees pay the other 1% of the core plan plus the difference in the premium if they choose the buy-up plan. Many companies have changed their policies and are offering only the HDHP option to help bring down their healthcare expenses. The premiums are much lower on the HDHP because the deductible is much higher and must be met before the plan starts paying. Employees open pre-tax savings accounts to help pay their deductible. The County can help supplement the employee's health savings account by making a specific donation to the account each month. That will encourage people to choose the HDHP and with the lower premiums, the County will still save money in the long run, depending on the amount they subsidize.

A special Fiscal Court meeting was scheduled for Wednesday, November 14, 2007 at 10:00 a.m. to review information about the High Deductible Health Plan (HDHP) and to determine whether and how much to contribute.

* * * * *

RESOLUTION: RELOCATE GRAVES

Gary McGruder had submitted a request several weeks ago, on behalf of Rolling Acres Farm, to remove and relocate several abandoned graves on their property. All the requirements have been met, the waiting period has passed, and a resolution has been drafted authorizing the relocation of the graves. Two of the graves will be moved to the Maraman family cemetery and the others will be moved to another location on the farm. The McGruders will pay all costs incurred and Ratterman's will be in charge of removing and relocating all the graves.

On motion of Esq. Bleemel, seconded by Esq. Walker, and with Fiscal Court having concurred, Resolution #07-36 authorizing the removal and relocation of several graves on Rolling Acres Farm property was adopted as recorded below and the Judge was authorized to sign same.

Vote: Unanimous for – motion carried.

COMMONWEALTH OF KENTUCKY
COUNTY OF BULLITT
RESOLUTION NO. 07-36

A RESOLUTION FOR THE REMOVAL AND RELOCATION OF ABANDONED GRAVES

WHEREAS, Rolling Acres Farm, LLC, by and through its agent Gary McGruder (hereinafter the "Applicant"), has filed an Application pursuant to KRS 381.755 to the Bullitt County Fiscal Court for an Order or Resolution for the Removal and Relocation of Abandoned Graves located on its property east of Buffalo Run Road and south of Cedar Grove Road (State Highway 480) in Shepherdsville, Kentucky;

WHEREAS, the Applicant has represented to Bullitt County Fiscal Court in the Application that the graves have been unattended for more than ten (10) years and abandoned;

WHEREAS, Notice of the Applicant's intended action to Remove and Relocate Abandoned Graves has been published pursuant to KRS Chapter 424 on August 29 and September 5, 2007, as shown by the attached Affidavits of Publication, and at least sixty (60) days have expired since the first publication;

WHEREAS, the Applicant has represented that it will relocate the graves to Maraman Family Cemetery and to another location on its property identified in the Application in Shepherdsville, Kentucky, which Bullitt County Fiscal Court finds to be a suitable place for relocation; and

WHEREAS, the Applicant has agreed to bear all expenses and assume full responsibility for the Removal and Relocation of the Abandoned Graves identified in the Application.

NOW, THEREFORE, BE IT RESOLVED BY THE FISCAL COURT OF COUNTY OF BULLITT, COMMONWEALTH OF KENTUCKY, that pursuant to KRS 381.755 and in reliance upon the representations made by Applicant, Bullitt County Fiscal Court does hereby authorize Applicant to Remove and Relocate the Abandoned Graves identified in the Application in conformity with the averments set forth therein, and that at any time after the expiration of sixty (60) days after the first publication of the Notice of such intended action, the identified Abandoned Graves may be removed and relocated, all at the expense of Applicant.

Adopted at a Regular Meeting of Bullitt County Fiscal Court on the 5th day of November, 2007.

BULLITT COUNTY FISCAL COURT

ATTESTED TO:

KEVIN MOONEY
BULLITT COUNTY CLERK

MELANIE J. ROBERTS
BULLITT COUNTY JUDGE/EXECUTIVE

* * * * *

MEETING RECESSED

The meeting recessed at 11:17 a.m. upon motion of Esq. Laswell, second by Esq. Walker, and unanimous vote in favor.

The meeting reconvened at 11:27 a.m. upon motion of Esq. Bleemel, second by Esq. Shepherd, and unanimous vote in favor.

* * * * *

WHEREAS, the City's current established job classification and wage scale system do not provide for all of the types of employees that are now required to effectively and efficiently operate the functions of City government, now therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF HILLVIEW, BULLITT COUNTY, KENTUCKY, as follows:

SECTION ONE: JOB CLASSIFICATION

The employees of the City of Hillview shall upon initial employment be assigned to one of the following:

1101	City Clerk
1102	Deputy Clerk
1103	Assistant Clerk
1104	Treasurer
2201	Police Chief
2202	Assistance Police Chief
2203	Police Major
2204	Police Sergeant
2205	Police Patrolman
2206	Code Enforcement Officer
2207	Part-Time Code Enforcement Officer
2208	Detective
3301	Public Works Director
3302	Public Works Level 2
3303	Public Works Level 1
4401	Animal Control Warden
4402	Assistant Animal Control Warden
5501	Recreation Director
5502	Recreation Assistant Level 2
5503	Recreation Assistant Level 1
6601	Custodian Level 2
6602	Custodian Level 1

SECTION TWO: WAGE SCALE

The minimum wage and maximum wage for each adopted Job Classification of an employee of the City shall be as follows:

Class	Minimum	Maximum
1101	$30,000 annually	$60,000 annually
1102	Federal minimum wage	$23.75 hourly
1103	Federal minimum wage	$19.75 hourly
1104	$28,000 annually	$57,500 annually
2201	$35,100 annually	$65,000 annually
2202	$33,000 annually	$62,000 annually
2203	Federal minimum wage	$27.00 hourly
2204	Federal minimum wage	$25.00 hourly
2205	Federal minimum wage	$23.75 hourly
2206	Federal minimum wage	$21.75 hourly
2207	Federal minimum wage	$21.75 hourly
2208	Federal minimum wage	$24.00 hourly
3301	$17,680 annually	$62,000 annually
3302	Federal minimum wage	$21.00 hourly
3303	Federal minimum wage	$19.75 hourly
4401	Federal minimum wage	$19.75 hourly
4402	Federal minimum wage	$15.75 hourly
5501	Federal minimum wage	$21.00 hourly
5502	Federal minimum wage	$16.25 hourly
5503	Federal minimum wage	$15.75 hourly
6601	Federal minimum wage	$19.00 hourly
6602	Federal minimum wage	$19.00 hourly

No employee shall be assigned to more than one job classification; nor receive compensation for a different job classification than the one to which they are assigned.

SECTION THREE: EFFECTIVE DATE

This Ordinance shall become effective upon publication

SECTION FOUR: UNCONSTITUTIONALITY

Should any section, clause, line, paragrah or part of this Ordinance be held unconstitutional or invalid for any reason, the same shall not affect the remainder of this ordinance.

SECTION FIVE: REPEAL

All ordinances or parts of ordinances in conflict with this Ordinance or any part of this Ordinance are repealed.

Given first reading at a special meeting of the City Council of the City of Hillview, Bullitt County, Kentucky, on the 6th day of August, 2007. Given a second reading, voted upon and passed at a regular meeting of the City Council of the City of Hillview, Bullitt County, Kentucky, on the 20th day of August, 2007.

117, in the Office of the Bullitt County Court Clerk.

BEING the same property conveyed to Roger M. Glass, Jr and Patricia A. Glass, his wife, by Deed dated July 20, 2002, of record in Deed Book 597, Page 240, in the Office of the Bullitt County Court Clerk.

That the Plaintiff shall recover from the Defendant(s) the sum of $184,571.26 with interest at the rate of $35.40 per diem from March 14, 2007, until paid, and the sum of $38,851.79 with interest at the rate of $12.53 per diem from March 14, 2007, until paid, the sum of $1,505.00 for Plaintiff's attorney fees incurred herein, with interest from the date of judgment, until paid, plus Plaintiff's court costs expended herein in the amount of $561.88.

That in order to secure payment of the above sums, I will sell at public auction to the highest and best bidder the above-described real estate, terms to be 10% down at the time of bid with the balance due in 30 days, bearing interest at the rate of 12% per annum until paid. Successful purchaser(s) shall be required to secure insurance with a loss payable clause in favor of the Master Commissioner or the Plaintiff.

The purchaser shall take the property free and clear of all liens and encumbrances except:

(a) All state, county, and school taxes for which the purchaser shall take no credit.

(b) Easements, restrictions, and stipulations of record and agreements of record.

(c) All matters disclosed by an accurate survey or inspection of the property

(d) Zoning regulations of Bullitt County Planning and Zoning Commission.

(e) Assessment for public improvements assessed against the property.

For further information, see report on file in the Bullitt Circuit Clerk's Office.

John A. Schmidt
Master Commissioner, Bullitt Circuit Court
P.O. Box 218
Shepherdsville, Kentucky 40165

Telephone: (502) 543-7011

BULLITT CIRCUIT COURT
DIVISION I
CIVIL ACTION NO. 06-CI-1334
DEUTSCHE BANK NATIONAL TRUST COMPANY, AS PLAINTIFF
TRUSTEE FOR MORGAN STANLEY IXIS REAL ESTATE
CAPITAL TRUST, 2006-1

VS.

JOHN INGRAM, ET AL. DEFENDANTS

By virtue of the judgment in the above-styled case entered on the 17th day of August, 2007, I will sell at public auction on Tuesday, the 11th day of September, 2007, at 9:00 a.m. at the Bullitt County Judicial Center located at 250 Frank E. Simon Ave., Shepherdsville, Kentucky, the following described real property located in Bullitt County, Kentucky; to-wit:

400 South Steedland Drive, Louisville, KY 40229

BEING Lot No. 134, as shown on the plat of MARYVILLE SUBDIVISION, Section AA, of record in Plat Book 4, Page 46, Bullitt County Clerk's Office.

BEING the same property conveyed to John W. Ingram and Karen Ingram, husband and wife, from Kathy E. Lunn n/k/a Anthony C. Turner, husband and wife, by deed dated February 28, 2006 and recorded March 27, 2006 in Deed Book 663, Page 207 of the Bullitt County Clerk's Office.

That the Plaintiff shall recover from the Defendant(s) the sum of $86,994.59 with interest at the rate of $18.96 per diem from July 19, 2007, until paid, plus its costs and fees herein expended

That in order to secure payment of the above sums, I will sell at public auction to the highest and best bidder the above-described real estate, terms to be 10% down at the time of bid with the balance due in 30 days, bearing interest at the rate of 12% per annum until paid

concerning this application shall be directed to: Kentucky Division of Water, Water Resources Branch, 14 Reilly Road, Frankfort Office Park, Frankfort, Kentucky, 40601. Phone (502) 564-3410.

Notice is hereby given that Oakbrooke Properties, LLC., P.O. Box 170, Mt. Washington, KY, 40047 has filed an application with the Natural Resources and Environmental Protection Cabinet to construct a culvert for a proposed road in Oakbrooke Point Section II. The property is located on US Highway 31 East/ 150 (bypass) approximately 1/4 mile northwest from the intersection with Highway 44 East in Mount Washington, Kentucky. The site will drain to an unnamed tributary of Floyds Fork. Any comments or objections concerning this application shall be directed to: Kentucky Division of Water, Water Resources Branch, 14 Reilly Road, Frankfort Office Park, Frankfort, Kentucky 40601. Phone: (502) 564-3410.

LEGAL NOTICE OF INTENDED ACTION TO REMOVE AND RELOCATE ABANDONED GRAVES

Notice is hereby given that Rolling Acres Farm, LLC intends to remove and relocate the abandoned graves of David Henderson, His Wife, WM Simmons, and Elizabeth Simmons that may be found in the vicinity presently located on property owned by Rolling Acres Farm, LLC, approximately 200 feet East of Buffalo Run Road and 1000 feet South of Cedar Grove Road (State Highway 480). The abandoned graves shall be removed andd relocated upon proper resolution or order of the Bullitt County Fiscal Court aafter sixty (60) days from the date of this Notice. Direct inquiries to Rolling Acres Farm, LLC 896 Bales Lane, Shepherdsville, Kentucky 40165. Phone No 955-7011.

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